City and Port of Cardiff

PUBLIC HEALTH DEPARTMENT

ANNUAL REPORT
1940

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ABERGAVENNY:
SEARGEANT BROTHERS LIMITED.
—
1941

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PREFACE.

It is a privilege again to write the preface for the Cardiff Annual Health Report. a privilege in this war of threat to democracy still to be associated with any product, however slight, of anything so typically democratic as British Local Government, a privilege to be associated with the eighty-eighth Annual Health Report of a City whose progressive-mindedness in administration of local government services would be hard to beat in any part of the world.

The description " Medical Officer of Health of the City and Port of Cardiff, School Medical Officer, Medical Officer for Mental Deficiency and Medical Officer for Public Assistance " is not just a string of grandiose titles invented to satisfy the vanity of the man who happens to have the honour of serving the City in these ways. They represent a unification of effort pervading the activities of many committees and of many officials labouring without cease for the benefit of the health and well-being of the citizens of Cardiff from before birth to death. To this end there work together, with continuing harmony and with astonishingly little overlapping or friction, the general health, port health, sanitary, hospital, tuberculosis, school medical, mental deficiency, maternity and child welfare, domiciliary medical, sociological, health educational, and, last but not least, the mental health services.

It may be of interest to compare some of the statistics of the first Cardiff Annual Health Report with those of this one :—

	1853.	*1940.*
Infant mortality per 1,000 births	258	59
Death-rate per 1,000 population	30 ·5	14 ·2
Tuberculosis of Respiratory System (" Consumption ") death-rate per 1,000 population .	5 ·3	0 ·78
Typhoid Fever death-rate per 1,000 population	1 ·8	0 ·004
Smallpox death-rate per 1,000 population	2 ·0	Nil.

The 1940 death-rate from tuberculosis was the lowest on record. As against that there was a slight increase in the cancer death-rate.

Despite continuance of black-out conditions, the number of deaths from road traffic accidents was reduced fom 50 (1939) to 33. The Accident Unit performs yeoman service in this connection and has become one of the outstanding features of the health services, a feature whose merit is very widely recognised.

Infectious disease was not troublesome, except for influenza in the first quarter of the year (contributing largely to the comparatively high death-rate of 14 ·2) and diphtheria, which took a greater toll not only in cases but also in deaths. It would be heartless, but not undeserved, to say in this connection to the people of Cardiff " it serves you right." Since 1926 they have had before them a model scheme for diphtheria immunization, the virtues of which have been extolled to the point of ramming it down

their throats. Yet they have remained, the majority of them, indifferent or apathetic, and it is only when the whole community is alive to its responsibilities towards the menace of diphtheria that the dread disease can by relatively simple means be stamped out. The figures on page 12 show how the people of New York City have awakened to the opportunity of removing diphtheria from their midst, or at least of reducing it to negligible proportions. In Cardiff Health Department, hopes in this direction are re-awakening as a result of a renewed drive conducted tirelessly by those of its faithful officers who have special charge of the diphtheria immunization scheme, and who would feel more than amply rewarded if the public would respond only a little more to their persuasive enthusiasm. They deserve that at least, and also that the interesting account of their efforts as recorded on pages 9-12 of the Report should be widely read.

An as yet less formidable enemy than diphtheria, but one unfortunately much more difficult to prevent, however great the public co-operation, is cerebro-spinal fever, the prevalence of which has increased throughout England and Wales from 315 cases with 194 deaths in 1914 to 12,771 cases with 2,584 deaths in 1940*. The position would be much worse were it not that of late years increasing success has been obtained in the treatment of the disease by new methods, which has reduced the case-mortality from over 60 per cent. to under 10 per cent. One of the institutions pioneering the application of these new and successful methods has been the Cardiff City Isolation Hospital (see page 15).

The increased municipalising of midwifery is shown by the figures (page 41) of 2,099 (49·2 per cent.) out of a total of 4,261 notified births and still-births having been attended by municipal midwives or at City Lodge Hospital. The maternal mortality rate for the same year was one of the lowest on record—2·91 per 1,000 births as compared with 4·58 per 1,000 births for the 10 years 1930-39. The municipal midwifery service began in 1937, and the increasing predominance of City Lodge modern maternity department in local midwifery began about the same time. It may be unscientific to attach any significance to the conjunction of these two sets of circumstances, which does nevertheless lend itself to gratifying conjecture.

With even less scientific justification for correlation of the facts, but with, I believe, happy augury, is the coincidence in the one year of the lowest tuberculosis death-rate on record with the beginning of the Tuberculosis Care Scheme. It is described on pages 37-39 of the Report and is inspired by the principle that care is necessary not only for the patient himself but for the family unit of which he forms part.

The National Milk Scheme superseded in the middle of the year 1940 the popular Cardiff Milk Scheme for expectant and nursing mothers and children under the age of five years. From the inception of the Cardiff scheme in 1919 the issue of free milk had increased from about 10,000 pints of fresh milk and about 1,500 pounds of dried milk to 385,640 pints of tuberculin tested milk and 12,954 pounds of dried milk in 1939—the last complete year of the scheme. The National Milk Scheme takes from the shoulders of the Cardiff ratepayers the direct responsibility of issuing free milk to the same classes of beneficiary, but finds it impracticable to arrange on a national scale the distribution of any liquid milk other than non-designated milk and dried milk other than standardised varieties of anonymous origin. The names of the well-known brands of dried milk, formerly such keen rivals, disappear from view for the time being.

" A thing of beauty . . . a joy for ever " is Cardiff's new Nursery School, which opened on 4th March, 1940, and is referred to briefly on pages 86 and 87 of the Report. It is " balm in Gilead " to the restless seeker after truth in preventive medicine. No one can visit it without coming away ardently believing that the shortest cut to Utopia would be nursery schools for all.

* Figures by courtesy of the Ministry of Health.

Other features of interest in the school medical service section of the Report are the descriptions of the results of a special nutrition survey (pages 75-79) and of the new Porthcawl Camp School (page 92).

In the nutrition survey, Dr. Murphy found amongst the great majority of malnourished school children a " marked deficiency in protein in their food " which, although mainly due to the economic factor, was partly influenced by " the strong traditional belief among many mothers that protein in the form of meat was injurious to children, and consequently it was not uncommon to find even in comparatively well-to-do families that the amount of meat allowed to the child was very meagre—in many cases being given only once weekly and then only in very limited quantity. Often this diet was not augmented by eggs or cheese."

Tribute must be paid to the enthusiastic co-operation of Mr. Tom Davies, Organiser of Physical Education in Boys' Schools, which takes the form of arranging exercises not only for the relatively well children, but also, in close consultation with the doctors, for deformed and physically defective children, *e.g.*, breathing exercises for asthmatics. An excellent poster devised in this way has been issued, with the object of assuring in adolescents enthusiasm for the ideal of " youth, physical recreation and service," of building upon the regular daily training given in the schools and of ensuring that " opportunities continue to be available for young people between the ages of 14 years and 19 years of age to participate in both indoor and outdoor recreation," thereby helping " to raise the national standard of health and physical efficiency of the rising generation." The poster is aptly illustrated by photographs of good and bad posture.

The examples of co-operation between many branches of the Local Government Service referred to in the early part of this preface are paralleled in the relatively new A.R.P. organisation of the Cardiff Corporation, in which the Health Department has endeavoured to organise worthily the A.R.P. Casualty Services. The hard test of experience has helped to weld together in increasing efficiency these services, as also their co-operability with the other branches of A.R.P.

In the interests of economy, every effort has been made to cut down this Report. Opportunity is here taken gratefully to acknowledge encouragement from members of the Council and loyal co-operation from members of the staff in steadfast pursuance under difficult conditions of manifold duties in endeavour to promote the health and welfare of the citizens of Cardiff.

The following publications by members of the staff appeared in 1940 :—

" Problems of Housing Estate Management " by Dr. J. Greenwood Wilson. *The Medical Officer*, 6th January, 1940.

" 100 Cases of Cerebro-spinal Fever " by Dr. G. Emrys Harries. *The Lancet*, 16th March, 1940.

" Education by Example " (the Cardiff Nursery School) by Dr. J. Greenwood Wilson. *Better Health*, September, 1940.

J. GREENWOOD WILSON,

City Hall,
Cardiff,
December, 1941.

CITY OF CARDIFF.

PUBLIC HEALTH DEPARTMENT.

Expenditure 1939-40.

Service	Total Expenditure	Income (Excluding Government Grants)	Net Cost of Service
(1) Health, etc., Services—	£	£	£
General Health Expenses	16,260	744	15,516
Food and Drugs Act	1,569	112	1,457
Diseases of Animals Acts	419	35	384
Midwives Acts	6,990	1,778	5,212
Shops Acts	614	5	609
Meteorological Station	52	2	50
	25,904	2,676	23,228
(2) Prevention and Treatment of Tuberculosis	45,854	474	45,380
(3) Maternity and Child Welfare Service	31,724	6,181	25,543
(4) Venereal Diseases	5,817	—	5,817
(5) School Medical Service	17,492	2,312	15,180
(6) Mental Deficiency Service	17,422	903	16,519
(7) Port Health Service	4,875	899	3,976
(8) Hospitals, etc. :—			
City Isolation Hospital	27,868	2,083	25,785
Caerau Smallpox Hospital	1,955	403	1,552
Lord Pontypridd Hospital (Dulwich House)*	1,757	1,529	228
Llandough Hospital	87,665	28,676	58,989
Municipal Accident Unit	10,814	2,688	8,126
Municipal Asthma Clinic	742	252	490
Total	£279,889	£49,076	£230,813

The School Medical Service and the Port Health Service rank for Government grants on a percentage basis and Government grant is also paid towards the expenditure on the Municipal Midwifery Service (Midwives Acts), but the grants are not shown in the above statement.

Contributions out of Government funds in respect of certain other services on which percentage grants were made prior to April, 1930, are now merged in the block grant to the Council.

* Maintained mainly out of proceeds of the Lord Pontypridd bequest.

GENERAL HEALTH SERVICE.

I.—SUMMARY OF GENERAL AND VITAL STATISTICS.

Acreage (land and inland water)	14,060*
Population (Census, 1931)	226,937*
Population (Estimated, mid-1940)	226,100
Number of persons per acre	16·0
Estimated number of inhabited houses	49,500
Estimated number of inhabited houses per acre	3·5
Estimated average number of persons per occupied house	4·56
Rateable value	£1,971,862
Estimated product of a penny rate	£7,625

Live births	3,746	Birth-rate per 1,000	16·5
Deaths	3,208	Death-rate per 1,000	14·2
Excess of births over deaths		Males, 108 ; Females, 430 ; Total, 538	
Deaths under 1 year	224	Death-rate per 1,000 births	59

Maternal deaths :—

	Number.	*Death-rate per 1,000 Live Births.*	*Death-rate per 1,000 Total Births.*
Puerperal and Post-abortive Sepsis	6	1·59	1·53
Other Maternal Causes	5	1·32	1·27
Total	11	2·91	2·80

Deaths from certain causes :—

	Number.	*Death-rate per 1,000.*
Typhoid Fever	1	0·004
Measles	2	0·009
Scarlet Fever	1	0·004
Whooping Cough	11	0·05
Diphtheria	32	0·14
Tuberculosis of Respiratory System	176	0·78
Other Forms of Tuberculosis	36	0·16
Cancer	370	1·63

* Including Rumney, which was added to Cardiff on 1st April, 1938.

II.—AREA AND POPULATION.

The area of Cardiff (land and inland water) is 14,060 acres.

According to the Census of 1931, the population of Cardiff (as extended on 1st April, 1938, by the inclusion of Rumney) was 226,937 (males 108,914, females 118,023).

The Registrar-General's estimate of the population for mid-1940 was 226,100.

The area and population of Cardiff are shown in municipal wards and registration sub-districts in the following table :—

Localities	Area in Acres (land and inland water)	Population	
		Census 1931	Estimated 1940
Adamsdown	948	17,209	15,000
Cathays	340	16,566	15,070
Gabalfa	1,461	18,703	20,450
Central	532	13,544	10,660
South	553	13,635	14,070
Central Registration Sub-District	3,834	79,657	75,250
Plasnewydd	235	15,056	14,200
Penylan	1,760	14,146	15,550
Roath	2,825	19,140	20,750
Splott	1,182	20,898	21,250
East Registration Sub-District	6,002	69,240	71,750
Llandaff*	2,731	27,762	16,350
Ely			16,850
Canton	249	17,273	15,100
Grangetown	925	15,403	14,500
Riverside	319	17,602	16,300
West Registration Sub-District	4,225	78,040	79,100
Whole City	14,060	226,937	226,100

*Llandaff was divided into two Wards (Ely and Llandaff) and minor alterations were made to several other Wards in November, 1936.

III.—BIRTHS.

The numbers of births and still-births registered and allocated to Cardiff during 1940, sub-divided according to sex and legitimacy, are shown in the following table :—

Births.

	Legitimate	Illegitimate	Total
Males	1,798	60	1,858
Females	1,820	68	1,888
Total	3,618	128	3,746

Still-births.

	Legitimate	Illegitimate	Total
Males	80	2	82
Females	63	4	67
Total	143	6	149

The 3,746 registered births were equivalent to a birth-rate of 16·5 per 1,000 of the population, as compared with 15·4 per 1,000 in 1939. The rates for legitimate births and illegitimate births were 16·0 and 0·5 per 1,000 respectively.

The 149 registered still-births constituted a rate of 38 per 1,000 total (live and still) births, as compared with 46 in 1939.

The following is a comparison of the birth-rate for 1940 and the preceding ten years with the birth-rates in England and Wales and the 126 Great Towns for 1940 :—

		Birth-rate per 1,000.
CARDIFF	1940	16·5
	1930-1939	15·8
England and Wales, 1940		14·6
126 Great Towns, 1940		16·0

IV.—DEATHS.

Deaths from All Causes.—The total number of civilian deaths from all causes and at all ages registered during the year and allocated to Cardiff was 3,208 (1,750 males and 1,458 females). The death-rate per 1,000 of the population was 14·2. The total number of civilian deaths registered in Cardiff was 3,276, but 516 of these were deaths of non-residents, which occurred mainly in hospitals and nursing homes, and 448 deaths of residents of Cardiff occurred and were registered in other areas—including Penarth, where Llandough Hospital is situated. Allowance has been made for these outward and inward transferable deaths in arriving at the net number. Of the 3,208 deaths belonging to Cardiff, 1,352, or 42·1 per cent. occurred in public institutions and nursing homes, as compared with 43·2 per cent. in 1939.

In comparing the death-rate with that for England and Wales and other towns, it is necessary to make allowance for differences in the sex and age groups of the population as compared with those for England and Wales. In the following statement, in which the death-rate for Cardiff in 1940 is compared with the death-rate for the preceding ten years and with the death-rates for England and Wales and the 126 Great Towns in 1940, the necessary allowances have been made, by multiplying the death-rates by the appropriate comparability factors :—

		Death-rate per 1,000
CARDIFF	1940	15·0
	1930-39	13·2
England and Wales, 1940		14·3
126 Great Towns, 1940		16·5

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death at various ages during 1940 :—

Causes of Death	All Ages			Age Periods					
	M	F	Total	Under 1 yr.	1–5 yrs.	5–15 yrs.	15–45 yrs.	45–65 yrs.	65 years and upwards
Typhoid and Paratyphoid Fevers	1	—	1	—	—	—	1	—	—
Cerebro-spinal Fever	14	13	27	5	2	6	7	5	2
Scarlet Fever	—	1	1	—	—	1	—	—	—
Whooping Cough	8	3	11	6	4	1	—	—	—
Diphtheria	14	18	32	2	12	17	—	1	—
Tuberculosis of Respiratory System	99	77	176	1	1	5	114	44	11
Other Forms of Tuberculosis	17	19	36	1	14	6	10	5	—
Syphilitic Disease ...	26	7	33	—	—	—	6	22	5
Influenza	40	31	71	2	—	1	11	24	33
Measles	1	1	2	1	1	—	—	—	—
Acute Poliomyelitis and Polioencephalitis ...	3	1	4	—	2	2	—	—	—
Acute Infectious Encephalitis.... . ..	1	—	1	—	—	—	—	—	1
Cancer of Buccal Cavity and Oesophagus	25	—	25	—	—	—	—	6	19
Cancer of Uterus	—	30	30	—	—	—	5	17	8
Cancer of Stomach and Duodenum	49	28	77	—	—	—	4	37	36
Cancer of Breast	—	33	33	—	—	—	2	19	12
Cancer of All Other Sites ...	99	106	205	—	1	—	17	81	106
Diabetes	5	14	19	—	—	—	3	3	13
Intra-cranial Vascular Lesions	157	144	301	—	—	—	4	75	222
Heart Disease	404	384	788	—	1	1	33	192	561
Other Diseases of the Circulatory System .. .	68	37	105	—	—	—	2	19	84
Bronchitis	157	112	269	19	13	1	12	80	144
Pneumonia	72	57	129	33	19	4	13	29	31
Other Respiratory Diseases	41	14	55	—	2	3	5	28	17
Ulceration of the Stomach or Duodenum .	21	3	24	—	—	—	5	13	6
Diarrhoea (under 2 years of age)	6	15	21	17	4	—	—	—	—
Appendicitis	10	7	17	—	1	—	9	2	5
Other Digestive Diseases ...	31	28	59	4	—	2	13	16	24
Nephritis	41	59	100	—	—	—	13	39	48
Puerperal and Post-abortive Sepsis	—	6	6	—	—	—	6	—	—
Other Maternal Causes ...	—	5	5	—	—	—	5	—	—
Premature Birth	30	20	50	50	—	—	—	—	—
Congenital Malformations, Birth Injury, Infantile Disease ..	37	35	72	70	1	—	—	1	—
Suicide	14	6	20	—	—	—	7	10	3
Road Traffic Accidents	27	6	33	—	3	1	9	7	13
Other Violent Causes	94	33	127*	4	12	4	44	42	21
All Other Causes....	138	105	243	9	4	8	38	57	127
All Causes	1,750	1,458	3,208	224	97	63	398	874	1,552

* Including 29 from War Operations.

Cancer.—The number of deaths from cancer was 370 (173 males and 197 females). The deaths are classified according to age and localisation of the disease in the preceding table. The death-rates for 1940, compared with those for the preceding 10 years, were as follows :—

	Death-rate per 1,000		
	Males	Females	Both Sexes
1940....	1·59	1·67	1·63
1930-1939	1·53	1·37	1·45

Deaths from Road Traffic Accidents.—The number of deaths due to road traffic accidents during 1940 was 33, as compared with 50 during 1939 and with 31—the average annual number for the preceding 10 years.

Maternal Mortality.—The number of deaths due to puerperal and post-abortive sepsis was six, and the number due to other maternal causes five, a total of 11, corresponding to death-rates of 2·91 per 1,000 live births and 2·80 per 1,000 total live and still-births.

The maternal death-rates for 1940 compared with the death-rates for the preceding ten years were as follows :—

	Maternal Death-rate per 1,000 Live Births		
	Sepsis	Other Causes	Total
1940	1·59	1·32	2·91
1930-1939	1·91	2·67	4·58

Infant Mortality.—The number of deaths under one year of age was 224. Of these, 211 were deaths of legitimate infants and 13 were of illegitimate infants. The infant mortality rate was 59 per 1,000 live births (legitimate 58 and illegitimate 101).

The infant mortality rate for 1940, compared with the rate for the preceding ten years and with the rates in England and Wales and the 126 Great Towns for 1940, was as follows :—

		Deaths under 1 year per 1,000 Births.
CARDIFF	1940	59
	1930-1939	66
England and Wales, 1940		55
126 Great Towns, 1940		61

The deaths from various causes under one year of age in several age periods during 1940, compiled from figures supplied by the Registrar-General, are shown in the following table :—

Causes of Death	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 4 weeks	4 weeks —3 months	3—6 months	6—9 months	9—12 months	Total
Cerebro-spinal Meningitis ...	—	—	—	—	—	1	3	—	1	5
Whooping Cough	—	—	—	—	—	3	2	1	—	6
Diphtheria	—	—	—	—	—	—	—	1	1	2
Tuberculosis of Meninges	—	—	—	—	—	—	—	1	—	1
Tuberculosis of Intestines	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	—	—	—	—	—	—	1	—	—	1
Congenital Syphilis	—	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	1	—	1	—	2
Measles	—	—	—	—	—	—	1	—	—	1
Haemorrhagic Conditions	—	—	—	—	—	—	—	—	—	—
Meningitis	—	—	1	—	1	—	—	—	1	2
Convulsions	—	—	—	—	—	—	—	—	—	—
Diseases of Ear	—	—	—	—	—	—	—	—	—	—
Bronchitis	1	2	1	—	4	6	3	5	1	19
Pneumonia	2	1	1	—	4	6	9	7	7	33
Other Respiratory Diseases	—	—	—	—	—	—	—	—	—	—
Inflammation of Stomach	—	—	—	—	—	1	1	—	—	2
Diarrhoea and Enteritis ...	1	—	—	—	1	8	5	2	1	17
Hernia, Intestinal Obstruction	—	—	—	—	—	1	1	—	—	2
Congenital Malformation ..	10	2	5	3	20	4	1	3	2	30
Congenital Debility ...	—	5	—	1	6	7	1	1	—	15
Premature Birth ..	27	13	2	2	44	4	1	—	1	50
Injury at Birth	7	—	1	—	8	—	—	—	—	8
Atelectasis	12	1	—	—	13	—	—	—	—	13
Pemphigus Neonatorum ..	—	—	—	—	—	—	—	—	—	—
Melaena Neonatorum	3	—	—	—	3	—	—	—	—	3
Other Diseases of Early Infancy	—	—	—	—	—	1	—	1	—	2
Lack of Care of New Born	—	—	—	—	—	—	—	—	—	—
Other Causes	4	—	—	—	4	2	2	1	1	10
All Causes	67	24	11	6	108	45	31	24	16	224
Percentage	*29·9*	*10·7*	*4·9*	*2·7*	*48·2*	*20·1*	*13·8*	*10·7*	*7·1*	—

V.—PUBLIC ASSISTANCE.

Public Assistance: Outdoor Relief.—The Director of Public Assistance has kindly supplied the following information regarding out-door relief :—

	Number of Persons in receipt of Relief			
	Men	Women	Children under 16 years	Total
First week, 1940 ...	2,335	3,903	2,091	8,329
Last week, 1940 ...	1,018	2,031	1,806	4,855

The main reason for the reduction in the numbers between the first and last weeks of the year was the coming into operation of the Old Age and Widows' Pensions Act, 1940, under which supplementary pensions became payable to old age pensioners in the week ended 10th August, 1940, resulting in the transfer of the chargeability of old age pensioners to the Assistance Board.

The total cost of out-door relief during 1940 was £163,777 14s. 11d., as compared with £170,994 in 1939.

VI.—NOTIFIABLE DISEASES.

(Other than Tuberculosis).

The incidence of notifiable diseases (other than tuberculosis) is shown in the following table, which also shows the number of notified cases admitted to hospitals :—

Disease according to Notification	Cases Notified	Notified Cases admitted to Hospitals
Scarlet Fever	293	115
Whooping Cough	446	50
Diphtheria	504	492
Measles	386	25
Acute Pneumonia	226	4
Cerebro-spinal Fever	186	179
Acute Poliomyelitis	34	28
Acute Polioencephalitis	9	9
Acute Encephalitis Lethargica	4	4
Dysentery	24	15
Ophthalmia Neonatorum	42	3
Puerperal Pyrexia	59*	32
Enteric Fever	4	4
Erysipelas	65	14
Malaria	10	—
Food Poisoning	14	6

* Including 14 cases which occurred among non-residents in institutions.

The cases of notifiable diseases are analysed according to age and sex in the following table :—

Disease	Under 1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-10 years		10-15 years		15-20 years		20-35 years		35-45 years		45-65 years		65 yrs. & upwards		All Ages		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Scarlet Fever	1	2	2	4	6	5	14	10	9	11	64	73	11	30	9	10	10	10	5	2	3	2	—	—	134	159	293
Whooping Cough	39	39	29	23	33	41	25	41	34	28	42	59	4	3	—	—	—	2	2	1	—	1	—	—	208	238	446
Diphtheria	9	2	9	6	12	12	20	15	24	23	104	101	38	45	14	34	6	23	1	4	—	2	—	—	237	267	504
Measles	8	6	17	12	19	17	26	25	32	27	75	57	8	6	4	10	13	14	2	3	1	4	—	—	205	181	386
Acute Pneumonia	4	5	6	6	8	4	1	2	2	3	12	11	2	2	9	4	14	16	22	6	42	19	15	11	137	89	226
Cerebro-spinal Fever ..	7	6	7	5	6	6	9	7	6	4	11	11	12	12	7	10	18	8	7	7	8	8	3	1	101	85	186
Acute Poliomyelitis ...	1	1	2	4	1	3	—	4	1	2	6	4	—	1	—	—	1	1	2	—	—	—	—	—	14	20	34
Acute Polioencephalitis	—	—	1	1	—	1	—	1	—	—	2	2	1	—	—	—	—	—	—	—	—	—	—	—	4	5	9
Acute Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	3	—	—	—	1	—	—	—	—	—	—	—	—	—	4	—	4
Dysentery	—	—	2	—	2	1	1	1	1	1	4	4	1	—	1	1	1	1	—	—	2	—	—	—	15	9	24
Ophthalmia Neonatorum	14	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	28	42
Puerperal Pyrexia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	41	—	14	—	—	—	—	—	59	59
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	1	—	1	—	—	2	2	4
Erysipelas	—	1	—	—	—	—	—	—	1	—	—	1	—	—	—	—	2	8	5	5	16	18	1	7	25	40	65
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	4	—	—	—	5	—	—	—	10	—	10
Food Poisoning ...	—	1	—	—	—	1	—	—	—	—	1	1	—	—	1	1	2	3	—	1	—	1	1	—	5	9	14

Smallpox and Vaccination.—No cases of smallpox have been notified since 1932. The following statement shows the results of the work in connection with the vaccination of infants whose births were registered during *1939* :—

Births registered during *1939*	4,120
Successfully vaccinated	1,590
Insusceptible	7
Exempted	1,963
Died unvaccinated	194
Postponed	63
Removed	108
Not found	174
Remaining to be dealt with	21

Scarlet Fever.—The number of notified cases of scarlet fever was 293, as compared with 786 in 1939, and, as in each of the two previous years, the disease caused only one death.

Diphtheria.—The numbers of cases and deaths and the case mortality rate during each of the 10 years 1931-40 were as follows :—

Year.	*Cases.*	*Deaths.*	*Case Mortality per cent.*
1931	589	24	*4·1*
1932	493	10	*2·0*
1933	476	19	*4·0*
1934	520	21	*4·0*
1935	349	19	*5·4*
1936	343	17	*4·9*
1937	588	20	*3·4*
1938	440	8	*1·8*
1939	437	14	*3·2*
1940	504	32	*6·3*

Active Immunization against Diphtheria.—Particulars of the work carried out during 1940 in connection with immunization against diphtheria are set out in the following tables :—

Persons	Subjected to Anterior Schick Test			Inoculated* but not subjected to Anterior Schick Test	Total Number Inoculated*	Failed to attend for Completion of Inoculation
	Number	Positive	Inoculated*			
Under 5 years	128	86	78	801	879	30
5 years and upwards	3,777	2,087	1,945	921	2,866	250
Total	3,905	2,173	2,023	1,722	3,745	280

*Complete course of injections.

Persons	Subjected to Posterior Schick Test			
	Negative	Positive and again Inoculated (one injection)	Total	Percentage Positive
Under 5 years	422	22	444	*4·9*
5 years and upwards	2,634	516	3,150	*16·3*
Total	3,056	538	3,594	*14·9*

For a number of years diphtheria immunization has formed an important section of the preventive work carried out by the Cardiff Public Health Department. At the commencement of 1940 the possibility of an increase in the incidence of diphtheria as a result of altered economic and social conditions due to the War was realised, and an intensive effort was made throughout the year to increase the number of children protected against the disease. The response of the public to the appeal was so gratifying that it may be of interest to give a description of the various channels through which the flow of information was brought to the notice of the public and of the results obtained.

Elementary Schools.—Although the ideal time to carry out immunization is during the pre-school period, it was realised that the best field for carrying out mass inoculation was in the elementary schools, especially in the infants' departments. With this end in view, schools situated in the congested areas of the city and in those districts where the incidence of diphtheria had been unusually high were visited by the Epidemic Officer.

Head teachers were first interviewed and details relating to the need for immunization and the methods by which it could be carried out were explained. The possible effects of rationing, insufficient clothing, exposure, over-crowding in air-raid shelters and war-time conditions generally were suggested as being likely to cause a general lowering of the resistance of the child population to infectious disease. Head teachers co-operated in a most whole-hearted manner and they were made responsible for the distribution of a printed letter to the parents of all children attending their schools. In many instances teachers themselves gave advice on the subject and persuaded parents to take advantage of the facilities provided for the benefit of the individual child and also of the general school population. In some schools 85 to 90 per cent. of the scholars accepted immunization, and in certain individual classes every member of the class was treated. Valuable assistance was also given to the medical officers who carried out the work by the teachers, in preparing class-lists of the children to be immunized and in marshalling the children in proper order at the time of the medical officers' visits to the schools. As a result of this co-operation, the inoculations were carried out rapidly, thus allowing large numbers of children to be treated in a session, with very little interference in their school routine. All records of children immunized have been carefully filed for future reference.

Completion of Course of Injections.—In previous years a number of children failed to receive the requisite number of injections to provide complete protection. Absence from school at the time of the medical officer's visit, parental apathy, or vague complaints of reactions following the first injection, were reasons for children missing one or two of the injections. In these instances a health visitor interviewed the parents at the home, or a letter was sent to the parents giving details of the treatment still required to complete the course and making further appointments for its completion. As a result of this follow-up system, very few children were left unprotected.

Home Visits by Sanitary Inspectors.—The routine visits to homes in which any infectious disease had been notified provided opportunities for sanitary inspectors to bring to the notice of parents the advantages of immunization and the provisions made for the prevention of diphtheria. Many parents accepted and acted upon the advice given in this manner.

Special Immunization Clinic.—Apart from the mass inoculations carried out in selected schools and the regular work carried out at maternity and child welfare centres, a special immunization clinic has been held near the centre of the city each week. This clinic caters for children attending schools in which it has not been possible so far to arrange for intensive work to be carried out in the school itself. It also deals with cases referred by general practitioners, sanitary inspectors and parents. To this clinic come the children who have failed to complete their course of treatment in school. The value of this regular weekly clinic, established solely for immunization work, cannot be over-estimated. It provides for the immediate inoculation of children from scattered areas who otherwise might have to wait until such time as the total number of applications in those areas reached a figure justifying a special visit of a medical officer. Between 40 and 50 children of all ages are dealt with each week at this clinic.

Maternity and Child Welfare Centres.—Immunization is carried out at all child welfare centres. The degree to which parents avail themselves of this opportunity seems to depend to a great extent upon the medical officer in charge of the centre and the assistance which he receives from the staff of health visitors. Certain of the centres show a good record of immunization work. At others the results are less satisfactory. With a view to improving the position, the recent circulars on immunization by the Ministry of Health have been brought to the notice of all medical officers in the department. Health visitors have been interviewed and the importance of this branch of preventive medicine stressed. The reduction in the number of injections consequent upon the use of A.P.T. will result in fewer visits having to be made to the centres by parents. It is anticipated that this, coupled with an increased enthusiasm on the part of child welfare medical officers and health visitors, will result in an increased response from the parents attending those centres in which the records of immunization have been below the average.

Birthday Letter.—The birth records of all children born in and belonging to Cardiff have been used to further the cause of immunization. The parents of each child who reaches its first birthday are sent a birthday letter, which suggests free immunization as the most suitable gift for the child's first birthday and encloses a form for return with request for immunization to be carried out if so desired. The letter has proved very effective, and each week a number of parents attend the special clinic or child welfare centres in response to the letter.

This innovation was introduced several years ago, and is modelled, by the courtesy of the Medical Officer of Health of New York City, on the birthday letter used in his immunization campaign. It has now been adopted by several other local authorities in this country.

Nursery School, Open-Air School, Etc.—The medical officers responsible for the medical care of children attending these schools make it a routine practice to offer immunization to the parents of every new entrant. In addition, a considerable amount of this type of work is carried out at the Corporation Hospitals, viz., Llandough Hospital, the City Isolation Hospital and Lord Pontypridd Hospital (Dulwich House). At Lord Pontypridd Hospital the parent of every child is communicated with at the time of the child's admission and treatment given while the child is in hospital. The response approaches the 100 per cent. mark. Close co-operation between all these hospitals and the Public Health Department in relation to the recording of cases immunized while inmates has been maintained.

Results Obtained during 1940.—The number of children treated during 1940 constitutes a record since the commencement of immunization in Cardiff in 1926.

The results appear to justify the assumption that the methods adopted by the Department in bringing the subject of immunization before the public have borne fruit, and the policy adopted during 1940 will continue along similar lines in the present year.

Grateful acknowledgments are due to the press, and especially the local press, which from time to time has made references to the urgent need for diphtheria immunization, but experience suggests that the vital factor in propaganda is the personal touch, and for this much is owed to the tireless efforts of Dr. Cecil W. Anderson, Assistant Medical Officer, of Mr. S. Mellings, Epidemic Officer, and of Mrs. B. Thomas, Health Visitor.

This report is prepared in response to Circulars 1903 (Wales) and 2230 (Wales) from the Welsh Board of Health, dated 10th January, 1940, and 12th December, 1940, which require information from local authorities as to action taken or proposed to be taken on the lines suggested for organising diphtheria immunization schemes. These suggestions had been anticipated by Cardiff in general principle as long ago as 1926, when diphtheria immunization was first introduced in Cardiff, and in detail during the twelve months preceding the issue of the first circular [1903 (Wales), dated 10th January, 1940]. In other words, almost all the suggestions made in these circulars had already been put into operation in Cardiff, and consequently the work carried out since the circulars have been received has been simply a continuation of the intensive schemes which were already in operation.

As to the results sought from an ever-increasing immunization campaign, the following figures have been seen (by courtesy of Professor Ralph M. F. Picken, Mansel Talbot Professor of Preventive Medicine at the Welsh National School of Medicine) from New York City, where an intensive campaign to secure the routine immunization of children against diphtheria was commenced in January, 1929 :—

City of New York : Diphtheria, Cases and Deaths, 1910-1940 inclusive.

Year.	*Cases.*	*Deaths.*	*Deaths per 100,000 children under 15.*
1910-19 (average)	14,282	1,290	83·0
1920-29 (average)	10,685	684	42·0
1930	3,794	198	11·7
1931	3,999	186	11·0
1932	3,581	210	12·4
1933	1,891	86	5·1
1934	1,593	103	6·1
1935	1,189	68	4·0
1936	1,124	35	2·1
1937	1,184	58	3·6
1938	700	26	1·6
1939	564	22	1·4
1940	408	10	0·7

Corresponding results will be achieved in Cardiff, as in any other area in this country, if and when the people rise to the occasion, as they have done in New York, and seize the opportunity of co-operating in this great measure of preventive medicine.

Enteric Fever.—There were only four notified cases of enteric fever—the same number as 1939. The disease caused one death.

Ophthalmia Neonatorum.—Forty-two cases of ophthalmia neonatorum were notified, 21 of which occurred in institutions. Of the other 21 cases, three occurred in private nursing homes, 13 were treated by private medical practitioners and five were treated by nurses of the Queen's Institute of District Nursing. Three of the cases were admitted to hospital. In 30 cases treatment was successful and the vision was unimpaired. The vision was impaired in two cases. Two of the infants died and eight removed from the district before the results of treatment could be ascertained.

VII.—CITY ISOLATION HOSPITAL.

Report for 1940 of G. Emrys Harries, M.B. B.S.(Lond.), M.R.C.S., L.R.C.P., D.P.H., Medical Superintendent.

In the course of the year, 1,571 patients (including patients from other districts) were admitted to the hospital for treatment.

The number of patients admitted, the average daily number of patients under treatment, the number of patient-days and the average duration of residence of patients are shown in the following table :—

Disease according to Diagnosis after Admission	Patients Admitted	Average Daily Number of Patients	Patient-days	Average Duration of Residence in Days
Scarlet Fever	118	9	3,430	29
Diphtheria	519	88	27,486	53
Other Diseases	934	49	20,687	22
All Diseases	1,571	146	51,603	33

Seventy members of the staff were Schick tested and 21 were found to be positive and inoculated against diphtheria.

Nine nurses sat the Final State Examination and all were successful.

Scarlet Fever.—One hundred and thirty-one patients were admitted as suffering from scarlet fever, the diagnosis being confirmed in 117 cases. In addition, one case notified as diphtheria proved on admission to be a case of scarlet fever, making 118 true cases of the disease. One patient admitted as a case of scarlet fever proved to be measles and another to be a case of chickenpox. The remaining 12 patients suffered from various non-notifiable eruptions. Of the true cases of scarlet fever, 113 were finally classified as simple, three as surgical and two as toxic. Twelve of the true cases suffered concurrently from other diseases. The type of scarlet fever prevailing was generally of a mild character, and in only two cases were injections of scarlatinal antitoxin (9,000 units) given. One hundred and five cases received oral sulphonamide therapy, with apparently beneficial effects. Only one death occurred amongst the true cases—a child aged 18 months, who also had whooping cough. Classifying this death to scarlet fever, the hospital mortality rate was 0·85 per cent.

Diphtheria.—The number of patients admitted as suffering from diphtheria was 662, of whom 518 were true cases of the disease and 81 were carriers ; of the other 63 patients, one was a case of scarlet fever and one a case of measles. The remaining 61 patients suffered mainly from a variety of throat conditions, 41 of which were tonsillitis. One case admitted as cerebro-spinal fever was diagnosed to be suffering from diphtheria.

Thirty-two deaths occurred amongst the 519 true cases of diphtheria, giving a case mortality rate of 6·1 per cent., as compared with 2·8 per cent. in 1939. Of the patients who died, 14 were under 5 years, 17 were in the 5-10 year group, and one was 48 years of age. The type of diphtheria generally was more serious than in 1939.

Twenty-six patients suffered from post-diphtheritic paralysis, the paralysis rate being 5·0 per cent., as compared with 5·9 per cent. in 1939.

The following table shows the death-rate per cent. according to the day of the disease on which serum was given after admission to hospital :—

Day of Disease on which Serum was given	Number of Patients	Number of Deaths	Number of Deaths per cent.
1st	32	1	*3·12*
2nd	119	7	*5·88*
3rd	135	7	*5·18*
4th	81	6	*7·41*
5th	57	3	*5·26*
Later than 5th	92	8	*8·69*
No serum given	3	—	—
Total	519	32	*6·1*

The patient who died on the first day suffered from laryngeal and bronchial diphtheria and was admitted when gravely ill following tracheotomy performed at another institution.

One diphtheria patient took her discharge without permission while in an infectious condition. She was compelled to return to hospital by a magistrate's order, and subsequently legal proceedings were successfully instituted against her for having exposed others to infection in a public place.

Measles.—Forty-three patients were admitted as suffering from measles, the diagnosis being confirmed in 31 instances. Eleven suffered from rubella and one from an adventitious rash. In addition, one case admitted as scarlet fever, two as rubella and one as diphtheria were found to be suffering from measles, making 35 true cases in all. One of the patients died.

Enteric Fever.—Thirteen patients were admitted as suffering from enteric fever, six of whom were found to be suffering from para-typhoid B., and one was a carrier of the disease. One patient was found on admission to be suffering from food poisoning (Salmonella group), whilst the remaining five patients were found to be suffering from other diseases. In addition to the six true cases of the disease, two patients admitted as suffering from cerebro-spinal fever were found to be suffering from para-typhoid B. No deaths occurred amongst these cases.

Bacillary Dysentery.—The number of patients admitted was 25, 22 proving to be true cases of the disease. Nine were of the Sonne group and three of the Flexner group. One case admitted as cerebro-spinal fever was found to be a case of bacillary dysentery—Sonne group. Ten cases could not be typed, and the remaining three cases were diagnosed as non-specific enteritis. All the patients made satisfactory recoveries.

Erysipelas.—Twenty-one patients were admitted as suffering from this disease and the diagnosis was confirmed in 17 instances. One of the patients died.

Cerebro-spinal Fever.—The number of cases admitted as cerebro-spinal fever was 479, the diagnosis being confirmed in 322 cases. Six cases were found to be encephalitis lethargica, seven to be polioencephalitis, 16 to be poliomyelitis, two to be para-typhoid B, one to be faucial diphtheria, one to be bacillary dysentery (Sonne group), seven to be tuberculous meningitis and one to be whooping cough. The remaining 116 cases suffered from various non-notifiable diseases.

There were 29 deaths amongst the true cases, the hospital mortality rate being 9·0 per cent., which compares very favourably with the figure for 1939 (20·7 per cent).

The exceptionally large number of admissions of cerebro-spinal fever cases (322) which was part of a general epidemic affecting the whole country, was by far the largest number admitted to the hospital in one year.

All the patients were treated with sulpho-pyradine therapy, and intra-thecal administration of serum was discarded. This hospital was the first to introduce cortical extract and intravenous glucose saline for the treatment of septicaemic types. Many patients admitted pulseless made full recoveries under this new treatment, whereas prior to its introduction all such cases died.

Whooping Cough.—Sixty-seven patients were admitted as suffering from this disease and the diagnosis was confirmed in 54 cases. One case erroneously admitted as cerebro-spinal fever was found to be a case of whooping cough. Sixteen of the cases were complicated by broncho-pneumonia, which caused death in five instances. The hospital mortality rate was therefore 9·1 per cent., as compared with 12·0 per cent. in 1939.

Food Poisoning.—Six patients suffering from food poisoning were admitted, all of whom were true cases. One belonged to the Aertryke group, three to the Gaertner group and two to the Salmonella group. One case admitted as enteric fever proved to be a case of food poisoning of the Salmonella group. All the patients made satisfactory recoveries.

Chickenpox.—The number of patients admitted as suffering from this disease was nine, one of whom suffered from impetigo only. One case admitted as scarlet fever was found to be suffering from chickenpox and another case admitted as chickenpox was found to be epidemic encephalitis. No deaths occurred amongst this group of patients.

Encephalitis Lethargica.—Seven patients were admitted as suffering from this disease, but in only three instances was the diagnosis confirmed. Six cases admitted as cerebro-spinal fever and one as chickenpox were also found to be suffering from encephalitis lethargica. Amongst the 10 true cases there was one death—a child of 18 months who died within five hours of admission.

Acute Poliomyelitis (including Polioencephalitis).—Thirty-four patients were admitted, of whom 27 were ascertained to be suffering from poliomyelitis and four from polioencephalitis. Sixteen cases admitted as cerebro-spinal fever were found to be suffering from poliomyelitis and seven from polioencephalitis. Amongst the 54 cases of poliomyelitis or polioencephalitis there were two deaths—a girl aged 2½ years and a boy aged 6 years.

Other Diseases.—Seventy-three patients (mainly members of the nursing and domestic staffs) were admitted to the hospital for the treatment of a variety of other diseases, of which 12 were tonsillitis and 22 were rubella. One of the patients died from lobar pneumonia.

Active Immunization against Diphtheria.—As usual, immunization against diphtheria was carried out in all cases admitted to hospital for conditions other than diphtheria when the consent of parents could be obtained. The total number of patients Schick tested was 95, of whom 38 were found to be positive ; of the positive cases, 26 were completely inoculated and found to react negatively to the posterior Schick test whilst in hospital.

VIII.—LORD PONTYPRIDD HOSPITAL (DULWICH HOUSE) AND THE RHEUMATISM SUPERVISORY SCHEME.

Twenty-five patients were in hospital on 31st December, 1939, and 90 were admitted during 1940. The number of patients discharged was 93, leaving 22 in hospital on 31st December, 1940. No deaths occurred at the hospital during the year. Ten patients were not treated to a conclusion, for the following reasons :—

Removed by parents against medical advice	5
Removed to Isolation Hospital—	
Diphtheria carriers	2
Transferred to Llandough Hospital	3
Total	10

The reasons for the admission of cases during 1940 were as follows :—

Chorea alone	6
Chorea and early carditis	35
Rheumatic pains alone	2
Rheumatic pains and early carditis	29
Chorea and valvular disease of the heart	4
Rheumatic pains and valvular disease of the heart	3
Arthritis alone	1
Early carditis alone	7
Valvular disease of the heart alone	2
Rheumatic pains and congenital heart disease	1
Total	90

The condition of the heart on admission and discharge of 80 cases treated to a conclusion is set out in the following table :—

Condition of Heart	On Admission	On Discharge
Normal	10	38
Minor cardiac manifestations	62	37
Major cardiac manifestations	8	5
Total	80	80

The average period spent in hospital by the 80 patients who were treated to a conclusion was 81 days.

The following table gives the condition of the heart on admission and discharge of all cases treated to a conclusion since the opening of the hospital in April, 1929 :—

Years 1929-40	Condition of Heart			Total
	Normal	Minor Cardiac Manifestations	Major Cardiac Manifestations	
On admission	152	986	168	1,306
On discharge	748	435	123	

The sedimentation tests carried out in the hospital during the year numbered 108.

Seventy-eight patients were Schick tested in hospital, 40 of whom were positive. Ten of these positive reactors were inoculated with diphtheria prophylactic in hospital, and 25 others were referred to the special immunization clinic on discharge for completion of the inoculations. In the five other cases consent was refused by the parents.

The following is a record of the supervisory work carried out during the year :—

Cases remaining under supervision at beginning of year		1,115
New cases attending		235
Cases discharged from supervision on attaining 14 years of age	278	
Other cases who ceased to be supervised :—		
Left Cardiff	5	
Died	13	
Discharged (not suffering from rheumatism)	69	
Ceased to attend	136	
	——	501
Cases remaining under supervision at end of year		849
Total attendances at routine Rheumatism Clinics		2,887
Routine clinic sessions held		147
Average attendance at routine clinic sessions		19·6
Average number of new cases at routine clinic sessions		1·6

The following table shows the condition of the heart in the 278 cases that ceased to remain under supervision because of attaining the age of 14 years :—

	On Ascertainment	On Discharge
Normal	88	170
Minor heart manifestations	163	85
Major heart manifestations	27	23
Total	278	278

The types of heart disease present in the 23 cases having major heart manifestations on discharge were as follows :—

Mitral regurgitation	18
Mitral stenosis	4
Aortic regurgitation	1
Total	23

IX.—LLANDOUGH HOSPITAL.

Report for 1940 *of David G. Morgan, M.R.C.S., L.R.C.P., Medical Superintendent.*

The hospital was partially evacuated in September, 1939, but by January, 1940, and throughout the year under review the beds were available for the civilian population as in peace-time. However, the sporadic night air raids of July to October, 1940, affected the admission of non-urgent cases, with the result that the figures for these months were lower than in any similar period in the history of the hospital.

The number of patients admitted to the medical beds exceeded those admitted to the surgical beds for the first time, the reason being that men who are now in H.M. Forces formed a large proportion of peace-time surgical cases. This fact accounts for the slight increase in the death-rate and in the diminution in the number of surgical operations performed.

We were very fortunate in having the services of Sir Thomas Lewis, C.B.E., the eminent cardiologist, as from September, 1940. He was evacuated to Cardiff with the fourth-year medical students of the University College Hospital, London. Sir Thomas Lewis has an international reputation in his speciality, and the hospital has been singularly fortunate in having his name associated with it.

The results of the examinations of the General Nursing Council continue to be very satisfactory.

The number of emergency medical service patients admitted during the year was 366, making a total of 6,441 patient days. The Ministry of Health will reimburse the City Council for the treatment of these cases, which included air-raid casualties, service sick, wounded, etc. In spite of the amount of money outstanding in respect of these patients, the sum collected by the Almoner slightly exceeded the sum for 1939.

The reports on the Accident Service and the Asthma Clinic, which are appended, show that these services are working at full pressure and that they are much appreciated by the public.

Nurses' Training School.

Fifteen nurses entered the final examination for admission to the general part of the State Register of Nurses, 14 of whom passed.

Social Service Department.

During 1940, £6,133 3s. 1d. was collected at the hospital from patients or their dependents.

The numbers of interviews by the Almoner were as follows :—

Patients admitted	4,669
Patients discharged	4,248
Relatives of patients who died	415
Total	9,332

The number of patients who were unable to make any payment for treatment was 758.

Cardiff Royal Infirmary Contributory Scheme.—A contribution of £3,000 was made by the Cardiff Royal Infirmary and 1,029 patients were admitted to the hospital under the scheme.

Asthma Clinic.—The sum collected in connection with treatment carried out at the Asthma Clinic was £135 15s. 9d.

Accident Service.—£680 1s. 7d. was collected in connection with out-patient treatment of accident cases.

Radium Treatment.—Twelve patients were transferred to the Cardiff Royal Infirmary for radium treatment.

Samaritan Fund.—During the year, 246 necessitous patients and their dependents were assisted by the Samaritan Fund, the assistance given being as follows :—

Payments for 'bus fares	242
Payments for train fares	2
Provision of surgical appliances	2
Total	246

The following is a statement of the account :—

	£	s.	d.
Cash in hand 1st January, 1940	29	2	1½
Donations	19	17	6
Collecting boxes in hospital	13	12	1½
Contribution by Newsagent from sale of newspapers, etc., in hospital	16	15	0
	£79	6	8
Expenditure	31	6	2
Balance in hand 31st December, 1940	£48	0	6

Hospital Library Service.

The number of issues of books to patients during the year was 15,309. An entirely new stock of 400 books was supplied by the Cardiff Public Library.

Consultants' Attendances.

No change has been made in the time-table of consultants' attendances, which was given in the report for 1938.

Admission and Asthma Clinics at City Lodge.

No change has been made in the time-table of the Admission Clinics as given in the report for 1938, but since the outbreak of war the Asthma Clinic has been held once a week only instead of three times a week.

STATISTICS.

Beds Provided.

Male	Medical	68	
	Surgical	34	
	Fracture and Orthopaedic	20	
		——	122
Female	Medical	64	
	Surgical	34	
	Gynaecological and Puerperal Pyrexia	38	
	Fracture and Orthopaedic	14	
		——	150
Children	General	64	
	Ear, Nose and Throat	9	
		——	73
	Total		345

Beds—	
Average daily complement	345
Average daily number available	342
Average daily number occupied	289
Average daily percentage occupied	*84·5*
Average length of stay of patients—days	22·7
Average number of patients per occupied bed	16·1
Average number of admissions daily	12·8
Maximum number occupied	327 on 12th March.
Minimum number occupied	232 on 17th August and 24th December.
Nursing Staff—	
Average strength daily	141
Average number of occupied beds per nurse	2·05

Patients.

Patients in hospital on 1st January, 1940	259	
Admitted	4,669	
	——	4,928
Discharged	4,248	
Died	415	
	——	4,663
Patients in Hospital on 31st December, 1940		265
Patients admitted from City of Cardiff		4,049
Patients admitted from Administrative County of Glamorgan and other areas		614
Patients discharged in the normal manner		4,180
Patients discharged against medical advice		68

Patients discharged to :—		
Their own or relatives homes	3,905	
City Lodge	253	
Other institutions or hospitals	90	
	——	4,248
Deaths		415
Total		4,663

Classification of Patients treated to a Conclusion.

Male patients :—		
Under 2 years	155	
2 years to 16 years	452	
Over 16 years	1,531	
	——	2,138
Female patients :—		
Under 2 years	128	
2 years to 16 years	451	
Over 16 years	1,946	
	——	2,525
Total		4,663

Results of Treatment or the Termination.

	Number.	*Percentage.*
Cured	2,763	*59·3*
Improved	1,012	*21·7*
No change	445	*9·5*
Worse	28	*0·6*
Died	415	*8·9*

ANALYSIS OF DEATHS.

Age at Death—Years	Males	Females	Total	Percentage
Under 1	19	17	36	*8·7*
1 — 2	12	9	21	*5·1*
2 — 5	6	4	10	*2·4*
5 — 15	13	9	22	*5·3*
15 — 25	18	12	30	*7·2*
25 — 35	5	22	27	*6·5*
35 — 45	15	19	34	*8·2*
45 — 55	25	25	50	*12·0*
55 — 65	40	37	77	*18·6*
65 — 75	54	31	85	*20·5*
Over 75	15	8	23	*5·5*
Total	222	193	415	*100·0*

	Treated	Percentage	Died	Case Mortality per cent.
Medical Cases	2,419	*51·9*	299	*12·4*
Surgical and Gynaecological Cases	2,244	*48·1*	116	*5·2*

	Number.	*Percentage.*
Deaths within 24 hours of admission	95	*22·9*
Deaths 24 to 48 hours after admission	31	*7·4*
Deaths 48 to 72 hours after admission	19	*4·6*
All other deaths	270	*65·1*
Total	415	*100·0*

Number of inquests	23
Number of inquests per 100 deaths	*5·5*
Number of autopsies per 100 deaths	*18·8*

Classification of the Diseases and Conditions for which the 4,663 discharged patients were primarily treated.

	Males		Females		Total
	Discharged	Died	Discharged	Died	
Diseases due to Infection	160	29	184	16	389
Diseases of the Nervous System	72	7	45	5	129
Diseases of the Eye	5	—	1	—	6
Diseases of the Ear	34	1	28	2	65
Diseases of the Nose	17	—	21	—	38
Diseases of the Circulatory System	52	26	102	31	211
Diseases of the Blood, Blood Forming Organs and Lymphatic System	22	1	32	2	57
Diseases of the Endocrine Glands	10	1	41	2	54
Diseases of the Breast	1	—	17	—	18
Diseases of the Respiratory System ...	129	27	93	24	273
Diseases of the Digestive System	702	32	657	23	1,414
Diseases due to Disorders of Nutrition or Metabolism	81	8	98	10	197
Diseases of the Generative System	115	22	473	6	616
Diseases of the Bones, Joints, Muscles and Fasciae	48	1	61	1	111
Diseases of the Areolar Tissue and Skin ...	63	2	64	1	130
Diseases of the Urinary Organs	51	12	42	17	122
Injuries	157	10	96	7	270
Tumours—Benign	4	2	35	9	50
Tumours—Malignant	54	29	69	35	187
Cysts—Acquired	5	—	5	—	10
Lipoma	—	—	—	—	—
Malformations	2	3	10	—	15
Miscellaneous	132	9	158	2	301
Total	1,916	222	2,332	193	4,663

Work of Departments.

Pathological	Investigations	23,290
Surgical	Major operations	1,436
	Minor operations	734
Dental	Patients	73
	Attendances for treatment	95
Radiological....	Patients investigated	2,428
	Investigations	2,994
Massage	Patients	210
	Treatments	2,205
Ultra-violet Light	Patients	84
	Treatments	229
Admission	Patients seen	758
Nurses' Sick Room	Admissions	85

Pathological Department.

Analysis of Investigations.

Swabs—Ear, nose and throat	120
Pus—Stained smears for organisms	230
Cultures for organisms	36
Smears—Stained for gonococci	48
Blood—Counts (full)	1,350
Leucocyte counts	1,320
Platelet and reticulocyte counts	98
Coagulation and bleeding time	15
Grouping	130
Chemical investigations	1,740
Cultures for organisms	44
Cerebro-spinal fluid—Various investigations	1,072
Pleural fluid—Various investigations	94
Urine—Microscopy of centrifugal deposit	2,126
Bacteriological investigations	80
Chemical investigations	11,250
Fractional test meals	230
Sputum—Stained smears for tubercle bacilli	714
Faeces—Bacteriological investigations	66
For occult blood	340
Chemical investigations	10
Pathological sections reported	1,700
Post-mortem examinations	87
Clinical photographs	30
Miscellaneous investigations	360
Total	23,290

In addition to the above-mentioned investigations, which were conducted in the Hospital Laboratory, many ear, nose and throat swabs, and specimens of blood for the Wassermann reaction were examined at the Cardiff and County Public Health Laboratory.

Analysis of Operations Performed.

	Major	Minor	Total
On skin and superficial structures	22	72	94
On arteries, veins and lymphatics	6	4	10
On bones and joints	100	44	144
On muscles, tendons, bursae and fasciae	7	7	14
Amputations	12	—	12
On skull, brain and spine	5	1	6
On mouth, pharynx and oesophagus	6	2	8
On thyroid and accessory glands	41	3	44
On breast	15	15	30
On thorax and contents	10	7	17
On abdominal wall and cavity	425	4	429
On stomach and duodenum	58	—	58
On intestines, rectum and anus	33	86	119
On liver, gall bladder, pancreas and spleen	21	—	21
On kidney and urinary tract	20	74	94
On male generative organs	38	77	115
On female generative organs	128	237	365
On ear nose and throat	488	67	555
Unclassified	1	34	35
Total	1,436	734	2,170

Operations performed by Consultant Staff	1,002
Operations performed by Resident Staff	1,168

Dental Department.

Number of patients treated	73
Attendances for treatment	95

Analysis of Attendances.

For extractions under general anaesthetic	34
For extractions with local anaesthetic	51
For examination without extractions	10
Total	95
Total number of teeth extracted	410

Radiological Department.

Analysis of Investigations.

Skull for injury	80
Skull for disease or deformity	108
Lung, mediastinum and pleural conditions	918
Heart and aorta	3
Oesophagus, stomach and intestines	33
Biliary passages	169

Urinary system	426
Generative system	3
Bones and joints for injury	781
Bones and joints for disease or deformity	390
Dental	24
Miscellaneous—for foreign bodies, etc.	59
Total	2,994

Special methods of investigation :—	
Barium meals	924
Barium enemata	163
Cholecystograms	102
Lipiodol injections	49
Urograms—intravenous....	222
Total	1,460

Number of patients investigated	2,428
Average number of investigations per patient	1·2
Average number of investigations per discharged patient	0·64
Percentage of appearances abnormal	*76·5*

Massage and Light Department.

	Massage	Ultra-violet Light
Patients treated	210	84
Remaining under treatment on 31st December, 1940....	5	—
Patients discharged	77	32
Number of treatments	2,205	229

Nurses' Sick Room.

Complement of nursing staff on 31st December, 1940	136
Average daily complement of nursing staff	141
Average daily complement of nurses available for duty	138
Nurses off duty sick during the year	67*
Nursing days lost (including sick leave)	1,119
Average number of nursing days lost per annum :—	
Per sick nurse	17
Per nurse of the average daily complement	8

* Eleven nurses off twice, two off thrice, and one off four times, making 85 admissions to the sick room.

Disabilities.	*Number.*
Septic conditions of the skin	15*a*
Other skin diseases	8
Appendicitis	1*b*
Injuries	4
Ear, nose and throat diseases	15*c*
Influenza	21
Gastric disturbances	6
Hallux valgus	2*d*
Pilonidal sinus	1*e*
Glandular fever	1
General debility	9
Diphtheria	1*f*
Pulmonary tuberculosis	1*g*

a Including four minor operations. *b* Major operation. *c* Including one minor operation. *d* Two major operations. *e* Minor operation. *f* Transferred to City Isolation Hospital *g* Transferred to Sanatorium.

ACCIDENT SERVICE.

During the year 1940 a further increase occurred in the number of patients treated by the accident service, the number of new cases being 3 256, as compared with 3,101 in 1939.

Number of patients under treatment and/or observation at the beginning of the year :—

Males	65
Females	63
Total	128

Number of patients referred for treatment :—

Males	1,948
Females	1,308
Total	3,256

Sources of ascertainment of patients dealt with for the first time :—

Private Practitioners	1,439
Police	423
Other sources	1,394
Total	3,256

How the patients dealt with for the first time received treatment :—

As in-patients at—	
(a) City Lodge (Fracture beds)	226
(b) City Lodge (Other beds)	125
(c) Llandough Hospital	105*
As out-patients	2,840
Total number of attendances of out-patients,	17,001

* Including 40 patients transferred from beds at City Lodge.

Number of patients discharged from treatment and/or observation* :—

Males	1,912
Females	1,304
Total	3,216

Number of patients remaining under treatment and/or observation at end of the year :—

Males	101
Females	67
Total	168

* Including patients who failed to return for treatment or observation.

ASTHMA CLINIC.

The work at the Asthma Clinic continued during 1940, but only one session was held each week. The number of Cardiff patients referred to the Clinic was the same as in 1939. This may be considered very satisfactory in view of the difficulties which were experienced during the year. The number of new cases was 218, as compared with 345 in 1939; the reduction was entirely due to the restriction of the facilities of the Clinic to residents of Cardiff.

New Cases :—

Males	106
Females	112
Total	218

Cases referred by :—	
Private Practitioners	151
School Medical Service	50
Llandough Hospital	8
Other sources	9
Total number of attendances	3,532

X.—POOR LAW MEDICAL SERVICE.

A summary of the work of the district medical officers during 1940 is given in the following table :—

Name of District	Whether Whole or Part-time D.M.O.	Attendances of Patients at Surgery	Attendances of Patients at Surgery for Medicine only	Visits to Homes of Patients	Individual Patients dealt with during the Year
*Roath (*a*)	Part-time	3,009	1,170	1,322	1,047
,, (*b*)	do.	2,458	873	1,282	578
Central	Whole-time	9,591	4,612	2,097	2,306
Canton	Part-time	3,936	296	2,383	340
South	do.	991	609	221	324
Splott (South)	do.	1,248	754	656	337
Adamsdown (South) .	do.	3,274	1,350	687	625
Gabalfa	do.	1,159	17	251	266
Llanishen & Rumney	do.	16	1	81	8
Ely	do.	1,716	805	746	609
Cathays	do.	3,501	824	1,746	881
Total ...	—	30,899	11,311	11,472	7,321

*Separated temporarily into two districts and work done by two part-time district medical officers since 12th November, 1939.

The following tabular statements show the hospital provision and the work undertaken during 1940 in connection with the institutional treatment of the sick at the City Lodge and Ely Lodge Poor Law Institutions.

City Lodge.

(1) Classification of the accommodation for the sick and the number of beds occupied by the civilian sick on 31st December, 1940 :—

Classification of Wards	Beds							
	Men		Women		Children (under 16 years)		Total	
	Provided	Occupied	Provided	Occupied	Provided	Occupied	Provided	Occupied
Medical / Surgical	34	—	58	21	—	—	92	21
Chronic Sick	197	174	123	122	—	—	320	296
Children	—	—	—	—	50	32	50	32
Venereal Disease	11	11	8	6	—	—	19	17
Tuberculosis ...	23	23	18	12	—	—	41	35
Maternity ...	—	—	58	29	—	—	58	29
Mental Disease	4	—	4	—	—	—	8	—
Other ...	10	7	12	7	—	—	22	14
Total ...	279	215	281	197	50	32	610	444

(2) In-patients :—

1. Total number of admissions (including infants born in hospital) 4,321
2. Number of women confined in hospital 851
3. Number of live births 799
4. Number of still-births 60
5. Number of deaths among newly born (i.e., under 4 weeks of age) 40
6. Total number of deaths among children under one year 48
7. Number of maternal deaths among women admitted to hospital for confinement 3
8. Total number of deaths 609
9. Total number of discharges (including infants born in hospital) 3,683
10. Duration of stay of patients included in 8 and 9 above :—
    - (*a*) Under four weeks 3,498
    - (*b*) Four weeks and under thirteen weeks 545
    - (*c*) Thirteen weeks or more 249
11. Number of beds occupied :—
    - (*a*) Average during the year 513
    - (*b*) Highest 585
    - (*c*) Lowest 443

(3) Out-patients :—

1. Cases after discharge from this hospital and Llandough Hospital attend for continuation treatment. Casualties after treatment are referred to private practitioners, or, if urgent, are admitted to this hospital or Llandough Hospital.
2. Total number of persons seen in the out-patient department 2,639*
3. Number of these persons who were subsequently admitted for in-patient treatment in the institution 349
4. Number of these persons who had received in-patient treatment in the institution 69
5. Total number of attendances in the out-patient department 3,066*

* Excluding accident service patients.

(4). Classification of civilian in-patients who were discharged from or who died in the institution during the year :—

Disease Groups	Children (under 16 years)		Men and Women	
	Dis-charged	Died	Dis-charged	Died
Acute infectious disease	26	—	8	—
Influenza	—	—	3	—
Tuberculosis :—				
Pulmonary	8	4	83	60
Non-pulmonary	14	1	10	4
Malignant disease	—	—	41	53
Rheumatism :—				
Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea	—	—	5	—
Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica)	—	—	5	—
Chronic arthritis	—	—	16	—
Venereal disease	8	—	41	6
Puerperal pyrexia	—	—	21	—
Puerperal fever :—				
Women confined in the hospital	—	—	—	—
Other cases	—	—	—	—
Other diseases and accidents connected with pregnancy and child-birth	—	—	1	4
Mental diseases :—				
Senile dementia	—	—	50	1
Other	—	—	189	—
Senile decay	—	—	76	174
Accidental injury and violence	81	1	350	26
Diseases of the :—				
Nervous system and sense organs	13	2	85	11
Respiratory system	18	10	123	25
Circulatory system	5	2	136	151
Digestive system	32	3	43	8
Genito-urinary system	2	—	68	22
Skin	170	—	97	1
Other diseases	45	33	79	7
Mothers and infants discharged from maternity wards (not included above) :—				
Mothers	—	—	963	—
Infants	768	—	—	—
Persons not falling under any of the above headings	—	—	—	—
Total	1,190	56	2,493	553

Ely Lodge.

(1) Classification of the accommodation and the number of beds occupied on 31st December, 1940 :—

Classification of Wards	Beds							
	Men		Women		Children (under 16 years)		Total	
	Provided	Occupied	Provided	Occupied	Provided	Occupied	Provided	Occupied
Mental Disease	137	109	169	162	—	—	306	271
Mental Defectives	60	66*	40	47*	32	26	132	139
Other	50	30	20	16	—	—	70	46
Total	247	205	229	225	32	26	508	456

* Beds transferred in emergency.

(2) In-patients :—

Total number of admissions	64
Total number of deaths	61
Total number of discharges	11
Duration of stay of patients :—	
(*a*) Under four weeks	5
(*b*) Four weeks and under thirteen weeks	6
(*c*) Thirteen weeks or more	61
Number of beds occupied :—	
(*a*) Average during the year	451
(*b*) Highest	457
(*c*) Lowest	445

(3) Classification of in-patients who were discharged from or who died in the institution during the year :—

Disease Groups	Children (under 16 years)		Men and Women	
	Discharged	Died	Discharged	Died
Acute infectious disease	—	—	—	1
Influenza	—	—	—	2
Tuberculosis—Pulmonary	—	1	—	1
Rheumatism—Chronic arthritis	—	—	—	1
Mental diseases :—				
Senile dementia	1	—	—	13
Other	3	—	—	—
Senile decay	1	—	—	1
Accidental injury and violence	3	—	—	—
Diseases of the :—				
Respiratory system	—	1	—	11
Circulatory system	—	—	—	27
Other diseases	2	—	—	2
Persons not falling under any of the above headings ..	1	—	—	—
Total	11	2	—	59

XI.—TUBERCULOSIS.

New Cases of Tuberculosis.—The following tables show the age distribution and localisation of the disease among new cases of tuberculosis coming to the knowledge of the department during 1940 :—

Cases of Tuberculosis by Age and Sex :—

Age Periods—Years	New Cases					
	Tuberculosis of the Respiratory System			Other Forms of Tuberculosis		
	Males	Females	Total	Males	Females	Total
0— 1	2	—	2	2	—	2
1— 5	1	3	4	14	6	20
5—10	2	4	6	12	15	27
10—15	5	—	5	7	7	14
15—20	11	25	36	5	6	11
20—25	24	15	39	4	9	13
25—35	44	43	87	4	7	11
35—45	41	22	63	3	7	10
45—55	32	5	37	2	1	3
55—65	19	6	25	1	1	2
65 and upwards	7	2	9	—	1	1
Total	188	125	313	54	60	114

Cases of Tuberculosis by Localisation of Disease and Sex :—

Form of Tuberculosis	New Cases		
	Males	Females	Total
Respiratory System	188	125	313
Nervous System	9	10	19
Intestines and Peritoneum	3	4	7
Vertebral Column	1	5	6
Bones and Joints	8	4	12
Disseminated Tuberculosis	2	—	2
Other Forms	31	37	68
Total	242	185	427

Sources of Ascertainment.—The new cases were ascertained as follows :—

Source	Tuberculosis of Respiratory System	Other Forms of Tuberculosis	Total
General Medical Practitioners	58	13	71
Welsh National Memorial Association	158	69	227
Medical Officers of Institutions	62	21	83
Other Medical Officers of Health	6	4	10
Otherwise ascertained	29	7	36
Total	313	114	427

Home Conditions of New Cases.—An analysis of the living and sleeping conditions within their own tenements of 260 new cases of tuberculosis of the respiratory system that came to the knowledge of the department during 1940 is given below.

Living accommodation of 260 patients in private houses *at the time of their coming to the knowledge of the department* :—

Rooms in Tenement (*i.e.*, house or part of house occupied by one family)	Patients			Total Number of Persons in Household			
	Males	Females	Total	Over 10 years	Under 10 years	Lodgers	Total
1 room	5	2	7	9	—	—	9
2 rooms	11	16	27	57	11	—	68
3 rooms	18	13	31	73	25	—	98
4 rooms and over	108	87	195	777	133	11	921
Total	142	118	260	916	169	11	1,096

In addition to the foregoing 260 cases, there were 10 cases (9 males and 1 female) in institutions and 9 cases (males) in lodging houses at the time of notification. Information as to the living accommodation of the remaining 34 cases (28 males and 6 females) could not be ascertained.

Sleeping accommodation of 260 patients suffering from tuberculosis of the respiratory system and living in private houses *at the time of their coming to the knowledge of the department* :—

Rooms in Tenement (*i.e.*, house or part of house occupied by one family)	Patients				Contacts		
	With Room to Self	With Bed but not Room to Self	With neither Bed nor Room to Self	Total	Sleeping in same bed as Patient	Sleeping in separate Bed but in same room as Patient	Total
1 room ...	5	1	1	7	1	1	2
2 rooms ...	3	6	18	27	20	14	34
3 rooms ...	9	—	22	31	24	4	28
4 rooms and over	107	16	72	195	75	38	113
Total ...	124	23	113*	260	120	57	177

* Including 87 married persons.

It will be seen that 124, or 47·7 per cent., of the new cases had sleeping rooms to themselves, and that the number of persons exposed to infection by sleeping in the same bedroom as patients was 177.

Known Cases of Tuberculosis.—Cases of tuberculosis remaining on the register of notifications at the end of 1940 were as follows :—

Tuberculosis of the Respiratory System :—

Males	721	
Females	501	
Total		1,222

Other Forms of Tuberculosis :—

Males	245	
Females	267	
Total		512
Grand Total		1,734

During 1940 the tuberculosis nurses made 3,514 visits to homes of patients.

Deaths.—The numbers of deaths from tuberculosis of the respiratory system and from other forms of tuberculosis during 1940 were 176 and 36, the death-rates per 1,000 being 0·78 and 0·16 respectively. The tuberculosis death-rates per 1,000 in each of the ten years 1931-1940 were as follows :—

Year	Tuberculosis of the Respiratory System	Other Forms of Tuberculosis	All Forms of Tuberculosis
1931	1·06	0·23	1·29
1932	1·05	0·21	1·26
1933	1·05	0·21	1·26
1934	0·93	0·22	1·15
1935	0·97	0·22	1·19
1936	0·87	0·18	1·05
1937	0·82	0·17	0·99
1938	0·86	0·13	0·99
1939	0·88	0·14	1·03
1940 ...	0·78	0·16	0·94

The two following tables show the age distribution and localisation of the disease among the deaths from tuberculosis during 1940.

Deaths from Tuberculosis by Age and Sex :—

Age Periods—Years	Deaths					
	Tuberculosis of the Respiratory System			Other Forms of Tuberculosis		
	Males	Females	Total	Males	Females	Total
0— 1	1	—	1	1	—	1
1— 5	—	1	1	9	5	14
5—10	—	1	1	—	1	1
10—15	3	1	4	2	3	5
15—20	6	13	19	1	3	4
20—25	8	13	21	—	1	1
25—35	19	20	39	—	2	2
35—45	20	15	35	1	2	3
45—55	19	6	25	1	1	2
55—65	15	4	19	2	1	3
65 and upwards	8	3	11	—	—	—
Total .	99	77	176	17	19	36

Deaths from Tuberculosis by Sex and Localisation of Disease :—

Form of Tuberculosis	Deaths		
	Males	Females	Total
Respiratory System	99	77	176
Central Nervous System	9	11	20
Intestines and Peritoneum	1	1	2
Bones and Joints	3	2	5
Skin and Subcutaneous Tissue	—	1	1
Genito-urinary System	3	2	5
Disseminated Tuberculosis	1	2	3
Total	116	96	212

The number and percentage of cases that were previously unknown to the department will be seen from the following figures :—

	Total Number of Deaths	Deaths of Cases previously unknown	
		Number	Percentage
Tuberculosis of the Respiratory System	176	16	*9·1*
Other Forms of Tuberculosis	36	7	*19·4*
Total	212	23	*10·8*

Treatment.—The following tables give particulars of the examination and treatment of Cardiff cases under the scheme of the Welsh National Memorial Association during 1940.

1.—Work of the Dispensary.

	Tuberculosis of the Respiratory System				Other Forms of Tuberculosis				Total				Grand Total
	Adults		Children		Adults		Children		Adults		Children		
	M	F	M	F	M	F	M	F	M	F	M	F	
A.—New cases examined during the year (excluding contacts) :—													
(*a*) Definitely tuberculous ...	146	106	2	4	14	20	24	17	160	126	26	21	333
(*b*) Diagnosis not completed* ...	—	—	—	—	—	—	—	—	82	49	32	21	184
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	622	248	72	70	1,012
B.—Contacts examined during the year :—													
(*a*) Definitely tuberculous	—	—	—	—	—	—	—	—	—	—	1	1	2
(*b*) Diagnosis not completed*	—	—	—	—	—	—	—	—	—	6	12	10	28
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	19	43	52	40	154
C.—Cases written off the Dispensary Register as :—													
(*a*) Recovered	10	9	3	3	7	9	8	10	17	18	11	13	59
(*b*) Non-tuberculous (including cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	—	—	—	—	—	—	677	312	135	123	1,247
D.—Number of cases on Dispensary Register on December 31st:—													
(*a*) Definitely tuberculous ...	475	346	16	37	79	104	85	81	554	450	101	118	1,223
(*b*) Diagnosis not completed	—	—	—	—	—	—	—	—	85	74	62	59	280

*i.e., Remaining undiagnosed on 31st December

1. Number of cases on Dispensary Register on January 1st 1,346
2. Number of cases transferred from other areas and cases returned after discharge under head 3 in previous years 55
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" 155
4. Cases written off during the year as dead (all causes) 150
5. Number of attendances at the Dispensary (including contacts) 9,923
6. Number of Insured Persons under Domiciliary Treatment on December 31st 5
7. Number of consultations with medical practitioners :—
   (*a*) Personal 252
   (*b*) Other 2,446
8. Number of visits by Tuberculosis Officers to homes (including personal consultations) 292
9. Number of visits by nurses or Health Visitors to homes for Dispensary purposes 2,904
10. Number of :—
    (*a*) Specimens of sputum examined in connection with Dispensary work . 814
    (*b*) X-ray examinations made in connection with Dispensary work 3,873
11. Number of "Recovered" cases restored to Dispensary Register and included in A (*a*) and A (*b*) above 6
12. Number of "T.B. plus" cases on Dispensary Register on December 31st 560

2.—Residential Treatment.

		In Institutions on Jan. 1st	Admitted during the year	Discharged during the year	Died in Institutions	In Institutions on Dec. 31st
Number of doubtfully tuberculous cases admitted for observation	Adult males	1	7	5	1	2
	Adult females	—	12	11	1	—
	Children ...	3	23	24	—	2
	Total ..	4	42	40	2	4
Number of patients suffering from Tuberculosis of the Respiratory System	Adult males	76	183	111	43	105
	Adult females	69	142	103	23	85
	Children ...	4	17	8	5	8
	Total .	149	342	222	71	198
Number of patients suffering from Other Forms of Tuberculosis	Adult males	6	16	16	1	5
	Adult females	6	23	21	1	7
	Children ...	15	42	38	3	16
	Total ...	27	81	75	5	28
Grand Total ...		180	465	337	78	230

3.—Results of Observation of Doubtfully Tuberculous Cases Discharged from Residential Institutions.

Diagnosis on Discharge from Observation	Pulmonary Cases												Non-Pulmonary Cases						Total		
	Sanatorium						Hospital														
	Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
	M	W	Ch	M	W	Ch	M	W	Ch	M	W	Ch.	M	W	Ch	M	W	Ch	M	W	Ch
Tuberculous	1	1	—	1	—	—	—	1	2	—	2	2	—	—	4	—	1	3	2	5	11
Non-tuberculous ...	—	—	—	—	—	—	2	2	—	—	1	1	—	—	2	—	—	1	2	3	4
Doubtful ...	—	—	—	—	1	—	—	—	—	—	1	4	1	—	4	1	2	1	2	4	9
Total ...	1	1	—	1	1	—	2	3	2	—	4	7	1	—	10	1	3	5	6	12	24

4.—Immediate Results of Treatment of Definitely Tuberculous Patients Discharged from Residential Institutions.

(*a*) Sanatorium (Pulmonary Cases).

Condition at time of Discharge	Duration of Residential Treatment												Total
	Under 3 months*			3-6 months			6-12 months			More than 12 months			
	M	W	Ch	M	W	Ch	M	W	Ch	M	W	Ch	
Quiescent	1	—	—	1	1	—	3	5	—	1	—	—	12
Not Quiescent	3	2	—	2	2	—	10	8	—	11	—	—	38
Died	—	—	—	—	—	—	—	—	—	1	—	—	1
Total	4	2	—	3	3	—	13	13	—	13	—	—	51

(*b*) Hospital (Pulmonary Cases).

Condition at time of Discharge	Duration of Residential Treatment												Total
	Under 3 months*			3-6 months			6-12 months			More than 12 months			
	M	W	Ch	M	W	Ch	M	W	Ch	M	W	Ch	
Quiescent	1	—	—	—	—	—	—	—	—	—	—	—	1
Not Quiescent	16	24	3	26	19	2	15	27	1	4	2	1	140
Died	18	7	1	6	4	1	4	3	2	1	2	—	49
Total ...	35	31	4	32	23	3	19	30	3	5	4	1	190

*Patients whose stay in residential institutions has not exceeded 28 days are not included.

(*c*) Hospital (Non-Pulmonary Cases).

Condition at time of Discharge	Duration of Residential Treatment												Total
	Under 3 months*			3-6 months			6-12 months			More than 12 months			
	M	W	Ch	M	W	Ch	M	W	Ch	M	W	Ch	
Quiescent	2	—	—	2	2	—	1	—	—	1	—	—	8
Not Quiescent	2	6	9	—	2	10	4	2	6	—	1	2	44
Died	—	1	—	—	—	1	—	—	—	1	—	—	3
Total	4	7	9	2	4	11	5	2	6	2	1	2	55

*Patients whose stay in residential institutions has not exceeded 28 days are not included.

Tuberculosis Care Scheme.—A tuberculosis care scheme, which was approved and adopted by the City Council in December, 1939, came into operation in January, 1940.

There is a Tuberculosis Care Committee consisting of five representatives of each of the following Committees :— Health Committee, Estates Committee, Public Assistance Committee and Education Committee, and two representatives of the Cardiff League of Social Service and Charity Organisation Society.

£2,000 per annum is provided by the Cardiff City Council for the expenditure involved.

The functions of the Committee under the scheme are generally to maintain the social welfare of tuberculous patients and the family units of which they form part, but the scheme is not applicable to persons to whom the provisions of Part II of the Unemployment Act, 1934, apply. The functions of the Committee include, amongst other things, the following :—

(*a*) Provision of food.

(*b*) Provision of boots and clothing, and, where necessary for the isolation of a patient, beds and bedding.

(*c*) Provision of such other assistance (e.g., assistance with rent where the head of the family is admitted to an institution) as may be necessary in individual cases.

(*d*) Recommendations in regard to housing.

(*e*) Provision of home helps where it is essential for the mother of a family to accept institutional treatment and where other arrangements cannot be made, or for any other reason.

(*f*) Arrangements for the temporary care of children when the mother is the person affected and has to go to an institution.

(*g*) Recommendations in the case of school children for the provision of school meals and attendance at the Open-Air School or the Nursery School.

Individual cases are dealt with on their merits, but the following is the scale of family income used for guidance in making grants of any kind :—

Size of Family (including Parents).	*Net Income per head per week (Including Grant).* s.	d.
2	16	0
3	13	9
4	12	6
5	11	8
6	11	0
7	10	6
8 and over	10	0

The following are taken into consideration in computing *gross* income :—

(*a*) 15 per cent. of the amount received from lodgers to be regarded as income.

(*b*) Weekly earnings over 20/- in the case of sons and daughters under 18 years and over 30/- in the case of those over 18 years to be ignored.

(*c*) The first 10/- per week of any pension also to be ignored.

In computing the *net* income the following deductions are made :—

(*a*) Rent.

(*b*) Mortgage repayments.

(*c*) Rates and water charges.

(*d*) Trade union contributions.

(*e*) Superannuation contributions.

(*f*) Insurance premiums.

(*g*) Payments to relatives or housekeeper.

(*h*) A maximum of 5/- for clubs (excluding clothing and similar clubs).

(*i*) Two-thirds of hire purchase payments.

(*j*) Total weekly payments in liquidation of arrears of rent.

(*k*) Other weekly expenses at discretion.

Grants made under the scheme to meet special needs arising from tuberculosis are not taken into account by the Public Assistance Committee in arriving at the amounts granted by them to meet normal maintenance needs.

The procedure is as follows :—

(*a*) Grants or assistance of any kind are made on medical grounds on the recommendation o tl e Tuberculosis Officer.

(*b*) Formal applications or assistance, giving financial circumstances, have to be made to the Medical Officer of Health.

(*c*) A Tuberculosis He lth Visitor investigates and reports upon the circumstances of applicants.

(*d*) Grants for assistance are made by a Tuberculosis Care (Grants) Sub-Committee, but in cases of urgency applications may be dealt with by the Medical Officer of Health, subject to approval of the Sub-Committee at their next meeting.

Grants of food and other articles (boots, clothing, bedding, etc.) are provided on official orders issued by the Medical Officer of Health.

Grants of food may be made to a family up to a maximum of 12s. 0d. per week in value and for a maximum period of six months, after which cases have to be reviewed by the Sub-Committee.

The number of persons who received assistance under the scheme during 1940 was 122.

XII.—VENEREAL DISEASES.

The following is a summary of the returns relating to persons dealt with at the venereal disease treatment centres during 1940.

	Cardiff Royal Infirmary	Royal Hamadryad Seamen's Hospital*	Auxiliary Centre for Mothers and Children	Institutions outside Cardiff	Total
A. Number of *persons residing in Cardiff* dealt with during the year for the first time and found to be suffering from :—					
Syphilis	76	144	14	1	235
Soft Chancre	1	90	—	—	91
Gonorrhoea	183	389	63	2	637
Conditions other than Venereal	108	34	75	2	219
Total	368	657	152	5	1,182
B. Number of attendances of all patients residing in Cardiff	9,097	8,326	2,619	39	20,081

Examination during 1940 of pathological material from *patients residing in Cardiff* and patients at institutions in or belonging to Cardiff :—

	Microscopical		Other Tests for Diagnosis of Venereal Disease
	For Syphilis	For Gonorrhoea	
Specimens examined at Treatment Centres :—			
Cardiff Royal Infirmary	620	340	400
Royal Hamadryad Seamen's Hospital*	23	73	—
Specimens examined at the Cardiff and County Public Health Laboratory from :—			
Treatment Centres :—			
Royal Hamadryad Seamen's Hospital*	—	—	300
Auxiliary Centre for Mothers and Children	—	186	92
Public Health Department	—	—	1,178
Other sources	5	182	2,064
	5	368	3,634
Total	648	781	4,034

* The figures relate to seamen, whether residents of Cardiff or not.

During the year, 381 doses of arsenobenzene compounds were supplied in 28 instances to 17 individual private medical practitioners.

The following table shows the numbers of *all persons* dealt with for the first time at the Cardiff treatment centres during each of the years 1931-1940 :—

Year	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Total		
	M	F	M	F	M	F	M	F	M	F	Both Sexes
1931	360	136	91	—	510	157	179	141	1,140	434	1,574
1932	327	114	104	—	585	146	163	135	1,179	395	1,574
1933 ...	378	88	92	—	577	140	175	125	1,222	343	1,565
1934	291	94	93	—	656	131	154	115	1,194	340	1,534
1935 ...	323	88	87	—	609	136	136	96	1,155	320	1,475
1936	291	97	104	—	669	167	165	80	1,229	344	1,573
1937 ...	290	60	123	—	696	177	168	77	1,277	314	1,591
1938	308	92	103	—	606	139	176	86	1,193	317	1,510
1939	317	56	92	—	580	147	161	76	1,150	279	1,429
1940	339	56	105	—	655	120	128	103	1,227	279	1,506

The following table gives the results of treatment and other particulars regarding *all persons* dealt with at the Cardiff centres during 1940 :—

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Total		
	M	F	M	F	M	F	M	F	M	F	Both Sexes
Number of cases under treatment or observation on 1st January....	188	320	11	—	140	254	16	27	355	601	956
Number of cases dealt with for the first time*	339	56	105	—	655	120	128	103	1,227	279	1,506
Number of cases discharged after completion of treatment and final tests of cure....	90	3	63	—	246	94	126	88	525	185	710
Number of cases which ceased to attend before completion of treatment	135	22	22	—	212	68	—	—	369	90	459
Number of cases which ceased to attend after completion of treatment but before final test of cure	68	11	1	—	104	2	—	—	173	13	186
Number of cases transferred to other centres or to institutions, or to care of private practitioners	60	4	21	—	96	5	—	—	177	9	186
Number of cases remaining under treatment or observation on 31st December	174	336	9	—	137	205	18	42	338	583	921

* Including cases that returned after being removed from the registers and cases transferred from other centres.

XIII.—MATERNITY AND CHILD WELFARE.

Notification of Births and Still-births.—The following statement shows the number of births and still-births notified as having occurred in Cardiff during 1940 :—

Notified by :—	*Births.*	*Still-births.*
Medical Practitioners	53	3
Municipal Midwives	1,207	34
Midwives of Queen's Institute of District Nursing	604	19
Private Midwives (Domiciliary)	407	11
Private Midwives (Nursing Homes) ...	726	30
Parents	5	—
Maternity Hospital (Cardiff Royal Infirmary)	257	47
City Lodge Hospital	795	63
Total ..	4,054*	207†

* Including 512 not belonging to Cardiff. † Including 64 not belonging to Cardiff.

Child Welfare Centres.—The following is a record of attendances at the child welfare centres :—

Number of Sessions	Attendances					Average Attendance at each Session
	Children under 1 year		Children 1 year to 5 years		Total	
	First	Subsequent	First	Subsequent		
642	2,658	19,371	277	9,291	31,597	49

The total number of children under five years of age who attended at the centres during the year and who at the end of the year were of the ages stated was as follows :—

Children under 1 year	2,466
Children over 1 year	3,718
Total	6,184

The following tabular statement shows the conditions found by medical officers in 2,385 infants under one year and 277 children between one and five years who were examined for the first time during 1940 and the diseases or defects discovered subsequent to first examinations :—

	Examined for first time		Diseases or Defects found in Children subsequent to their first examination	
	Under 1 year	1 to 5 years	Under 1 year	1 to 5 years
Number examined :—				
Normal	1,675	91	—	—
Individual cases found with Diseases or Defects ...	710	186	—	—
Diseases or Defects found :—				
Injury at Birth	7	—	1	—
Congenital Malformation or Defect	49	2	14	12
Prematurity	34	—	8	—
Congenital Debility	11	1	4	4
Malnutrition (cause not specified) or Debility (not congenital)	42	11	95	134
Anaemia (cause not specified)	3	3	14	37
Diseases or Defects of :—				
Skin (Non-syphilitic) :				
Systemic	46	5	223	157
Contagious	17	13	59	148
Irritative	98	12	277	122
Eye : Ophthalmia Neonatorum	23	1	18	9
Squint	3	21	15	73
Other	51	16	135	80
Ear : Otorrhoea	11	1	80	59
Other	3	3	34	27
Nose and Throat :				
Enlarged Tonsils and/or Adenoids ...	2	9	3	85
Other	14	5	53	60
Heart and Circulation : Congenital	6	—	3	6
Rheumatic	—	—	—	1
Other	1	—	7	5
Respiratory System (non-tuberculous)	48	20	512	259
Digestive System : Hernia—Umbilical	152	4	64	19
Other	11	2	29	12
Other Diseases	108	24	1,237	375
Nervous System : Chorea	—	1	12	—
Other	—	1	21	21
Genito-urinary System : Phimosis	72	1	68	35
Other	9	3	38	66
Tuberculosis : Pulmonary—				
Definite	—	1	—	3
Suspected	—	1	—	3
Non-Pulmonary	—	2	—	7
Defective Teeth	1	48	7	308
Rickets	1	2	13	27
Other Deformities	19	17	43	134
Rheumatism (not Cardiac or Nervous)	—	1	1	13
Syphilis	—	—	—	—
Other Diseases or Defects	20	19	66	106

Ante-natal and Post-natal Clinics.—The record of attendances at the ante-natal clinics is given in the following statement :—

Number of Sessions	Attendances					Average Attendance at each Session
	Expectant Mothers		Post-natal Cases		Total	
	First	Subsequent	First	Subsequent		
457	1,953	5,956	13	5	7,927	17

The number of notified births (live and still) belonging to Cardiff and the number of expectant mothers who attended the ante-natal clinics for the first time during the year were as follows :—

(*a*) Total number of notified births (live and still) 3,685

(*b*) Number of expectant mothers who attended the ante-natal clinics 1,953

(*c*) Percentage of notified births represented by (b) *53·0*

Expectant mothers attending the ante-natal clinics are subjected to a blood test for syphilis, namely, the Wassermann reaction. During 1940 the number of tests made was 1,174, of which 13, or 1·1 per cent., were found to be positive, and the expectant mothers concerned were referred for treatment to the special treatment centre for mothers and children.

The following is a record of attendances at the special post-natal clinic :—

Number of Sessions	Attendances.			Average Attendance at each Session
	First	Subsequent	Total	
17	72	2	74	4

Birth Control.—In February, 1940, the City Council entered into an arrangement with the Cardiff Birth Control Clinic (a branch of the Society and Clinic for Constructive Birth Control and Racial Progress) under which married women attending the ante-natal clinics could be referred to the Clinic for advice on sterility or birth prevention where further pregnancy would be detrimental to health. The arrangement came into operation in March, 1940, and to the end of the year the number of cases referred to the Clinic was 12.

Maternity Hospitals.—The number of expectant mothers admitted to the Maternity Hospital (Cardiff Royal Infirmary) was as follows :—

Complicated cases sent by General Practitioners	41
Cases admitted through Ante-natal Clinics	145
Total	186

The number of expectant mothers admitted through ante-natal clinics to City Lodge Hospital for confinement was 559.

Maternity and Nursing Homes.—At 31st December, 1940, there were 18 registered nursing homes, 11 providing for maternity cases only, 4 providing for surgical and/or medical cases only, and 3 providing for both maternity and other cases. The total number of beds in these nursing homes was 214, of which 91 were available for maternity cases. The homes are supervised by a medical officer of the department, who paid 26 visits to the homes during the year.

Dental Clinics.—The following is a record of the work carried out at the dental clinics in connection with maternity and child welfare :—

	Expectant Mothers	Pre-School Children	Total
Referred for dental treatment by Medical Officers ...	472	516	988
Found to be in need of treatment	425	437	862
Received treatment	309	402	711
Made dentally fit	325*	364	689
Attendances	1,399	474	1,873
Treatment :—			
Teeth filled	71	18	89
Teeth extracted	2,719	1,200	3,919
Dressings	18	13	31
Scalings	29	1	30
Administrations of general anaesthetics	412	443	855
Supplied with dentures	182	—	182

* Including cases carried over from 1939.

Domiciliary Visits by Health Visitors.—The following is a summary of the visits made by the health visitors :—

Births—First visits		3,210
Births and infant deaths—Combined visits		28
Infant death investigations		136
Still-birth investigations		152
Subsequent visits	Infants under one year	7,342
	Children over one year	11,628
Ante-natal cases	First visits	171
	Re-visits	52
Post-natal cases	First visits	2
	Re-visits	1
Infectious diseases :—		
Ophthalmia neonatorum	First visits	41
	Re-visits	89
Puerperal pyrexia	First visits	9
	Re-visits	—
Measles	First visits	573
	Re-visits	37
Whooping cough	First visits	679
	Re-visits	24
Mumps	First visits	536
	Re-visits	1
Financial inquiries		434
Other visits		8,357
	Total	33,502

Milk for Mothers and Children.—Milk was supplied free of charge in necessitous cases to the following extent :—

	Tuberculin Tested Milk*			Dried Milk*		
	Persons supplied with Milk	Applications for a month's supply	Pints granted	Persons supplied with Milk	Applications for a month's supply	Pounds granted
Expectant Mothers	224	299	16,531	1	5	36
Nursing Mothers	220	860	32,664	1	1	12
Children under 1 year	146	983	35,133	278	1,164	8,569
Children 1 yr to 5 yrs	370	5,763	186,685	—	1	6
Total	960	7,905	271,013	280	1,171	8,623

* The free supply of Tuberculin Tested milk and dried milk ceased on 31st July and 31st August, 1940, respectively, on the coming into operation of the National Milk Scheme.

Midwives.—The number of midwives practising in Cardiff at the end of the year was 85. They are classified according to type of practice as follows :—

Municipal midwifery service (domiciliary)	18
Queen's Institute of District Nursing	8
At City Lodge Hospital (Maternity Wards)	19
At Cardiff Royal Infirmary (Maternity Branch)	4
At private nursing homes	15
Private practice	21
Total	85

Officers of the department made 52 visits of inspection of midwives.

The following is a record of the practice of midwives in relation to births and still-births attended by them during the year :—

	Domiciliary Cases		Cases in Institutions		Total
	As Midwives	As Maternity Nurses	As Midwives	As Maternity Nurses	
Employed by the Council :—					
(a) As Municipal Midwives	1,011	230	—	—	1,241
(b) At City Lodge Hospital	—	—	817	34	851
Employed by Queen's Institute of District Nursing	563	62	—	—	625
Employed at Maternity Hospital (Cardiff Royal Infirmary)....	—	—	232	63	295
Employed at Nursing Homes	—	—	199	578	777
Private Midwives	314	170	—	—	484
Total	1,888	462	1,248	675	4,273

Medical Practitioners called in by Midwives in Emergency.—The number of instances in which medical practitioners were called in by midwives in emergency was 1,080 and claims for fees were made by practitioners in 899 cases. The fees claimed totalled £1,508 6s. 0d., and in 436 instances fees amounting to £678 3s. 8d., were reclaimed from the persons responsible.

Specialist consultations took place in four complicated cases.

The following statement gives the reasons for medical help being summoned by midwives :—

(1) MOTHER :—		
(*a*) *Pregnancy*—		
Miscarriage (including abortion)	90	
Haemorrhage	39	
Albuminuria and oedema and other toxic causes	27	
Other causes	38	
	——	194
(*b*) *Labour*—		
Abnormal presentation	40	
Premature labour	18	
Obstructed and delayed labour	303	
Placenta praevia, ante-partum haemorrhage and eclampsia and other toxic causes	51	
Post-partum haemorrhage and retained and adherent placenta	36	
Ruptured perineum	137	
Other causes	43	
	——	628
(*c*) *Lying-in*—		
Pyrexia, secondary post-partum haemorrhage and phlegmasia and other septic causes	45	
Other causes	38	
	——	83
(2) INFANT :—		
Debility	40	
Inflammation of or discharge from eyes	63	
Other causes	72	
	——	175
Total		1,080

Home Nursing.—The following is a record of the work done by the Queen's Institute of District Nursing in connection with maternity and child welfare :—

Disease or Defect	Cases carried over from 1939		Cases referred for Treatment during 1940		Total	
	Cases	Visits	Cases	Visits	Cases	Visits
Skin :—Impetigo	3	18	26	519	29	537
Other Skin Diseases	—	—	17	325	17	325
Eye :—Ophthalmia and Ophthalmia Neonatorum	1	2	17	603	18	605
Other Eye Defects	1	5	69	1,221	70	1,226
Minor Ear Defects	1	3	14	131	15	134
Miscellaneous	4	32	91	797	95	829
Total ..	10	60	234	3,596	244	3,656

Maternity Bags.—Maternity bags were lent in nine necessitous cases.

Home Helps.—Home helps were provided in 186 instances in which mothers confined at home were without adequate domestic help and without means of obtaining it.

Crippling Defects and Orthopaedics.—The following is a summary of the work carried out at the orthopaedic clinic during 1940 :—

	Children under School Age.
Consultation Clinic :—	
Examined for first time	278
Recommended for treatment and/or appliances for first time	180
Recommended for further treatment and/or appliances	193
Recommendations for :—	
Treatment in Hospital	22
Treatment at Clinic (Special and Routine)	144
Appliances	46
Alterations to appliances	4
Alterations to boots	182
Other forms of treatment	9
Treated at Clinic for first time	50
Attendances at Clinic	842
Routine Treatment (massage, electricity, exercises, etc.) :—	
Treated at Clinic for first time	90
Attendances for routine treatment	1,584

The following statement relates to treatment at and provision of appliances, etc., through the Prince of Wales' Hospital, Cardiff, during 1940 :—

	Children under School Age.
Hospital Treatment :—	
Admitted to Prince of Wales' Hospital :—	
(*a*) Day Cases	7
(*b*) Other Cases	15
Under treatment at Prince of Wales' Hospital at end of 1940	13
On Prince of Wales' Hospital waiting list at end of 1940 :—	
(*a*) Day cases	—
(*b*) Other cases....	9
Other treatment or provision (including appliances, etc., provided following hospital treatment) :—	
Appliances provided	63
Appliances altered	9
Alterations to boots	348
Other forms of treatment provided	11

The diseases or defects found in children examined for the first time during the year were as follows :—

Diseases or Defects.	*Number.*
Defective posture	1
Flat feet	58
Bow legs	30
Talipes	6
Rickets	1
Poliomyelitis	33
Spastic paralysis	3
Birth palsy	5
Congenital malformation or deformity	13
Torticollis	16
Knock knee	35
Coxa vara	3
Metatarsus varus and intoeing	27
Claw feet	1
Tuberculous disease	2
Other defects	44
Total	278

The following is a classification of the cases discharged during the year :—

Reason.	*Number.*
Cured	32
Improved	19
Unlikely to benefit further	3
Left the district	3
Failed to attend for treatment....	30
Other reasons (including trivial defects)	7
Total	94

Nose and Throat Defects.—The following is a summary of the work done in connection with the treatment of children under school age suffering from enlarged tonsils and/or adenoids :—

Examined at Clinic for first time	137
Received operative treatment at Llandough Hospital	14
Received other forms of treatment at Clinic	58
Total attendances at Clinic	224

Visual Defects.—The following statement summarises the work done in connection with the examination of visual defects in children under school age :—

Attended Clinic for first time	127
Examined for errors of refraction	100
For whom spectacles were prescribed	99
For whom spectacles were provided :—	
(*a*) By parents	76
(*b*) By Council free of charge	10
Treatment for other eye defects prescribed and provided	48
Total attendances at Clinic	366

Radiography.—The number of individual cases referred from the maternity and child welfare centres for radiography was 66, the total number of radiograms taken being 77. The parts of the body (69) that required X-ray examination in the 66 cases were as follows :—

Spine	1
Shoulder	2
Arm	4
Wrist	39
Finger	1
Hip	13
Knee	3
Leg	3
Foot	3
Total	69

Artificial Sunlight Treatment.—Owing to staff difficulties, artificial sunlight treatment, which was temporarily discontinued on the outbreak of war, was not resumed during the year.

Child Life Protection.—The following statement gives particulars of the numbers of persons and children registered at the end of 1940 and visits by the visitor specially engaged in this work during the year :—

Persons on the register who were receiving children for reward at the end of the year	53
Children on the register :—	
(*a*) At the end of the year	56
(*b*) Who died during the year	—
First visits	14
Routine visits	457
Special visits	100

Adoption of Children Act, 1926.—The visitor specially engaged in duties in connection with child life protection dealt with 28 cases during the year in which the Council acted as guardian *ad litem* ; the number of visits made in connection with the cases totalled 113.

XIV.—PUBLIC HEALTH LABORATORY.

Cardiff and County Public Health Laboratory.—The numbers of specimens and samples examined for Cardiff during 1940 were as follows :—

Bacteriological Examinations :—	
Water Supplies	598
Milk for Tubercle Bacilli	124
Milk for General Examination	755
Ice Cream for General Examination	80
Sputum for Tubercle Bacilli	853
Urine for Tubercle Bacilli	25
Other Specimens foı Tubercle Bacilli	67
Rodents for Plague	242
Specimens for :—	
Diphtheria	3,465
Haemolytic Streptococci	241
Enteric Fever (Serum)	108
Enteric Fever (Other Specimens)	149
Dysentery	330
Food Poisoning Organisms	49
Gonorrhoea	618
Syphilis (Wassermann Reaction)	3,412
Syphilis (Spirochaeta Pallida)	6
Ringworm	6
Cerebro-spinal Fluid	79
Other Examinations	96
Chemical Examinations :—	
Water Supplies	374
Milk and Milk Products	160
Ice Cream	80
In connection with Atmospheric Pollution	35
In connection with Ultra-Violet Radiation	368
Other Examinations	46
Total	12,366

XV.—FOOD INSPECTION.

Meat Inspection at Municipal Abattoirs.—The following tables set out in detail the work done in connection with meat inspection.

Animals slaughtered and inspected :—

	Roath Abattoir	Canton Abattoir*	Total
Cows	3,648	60	3,708
Bulls	267	6	273
Heifers	3,756	73	3,829
Steers	3.167	40	3,207
Calves	7,781	52	7,833
Sheep and Lambs	102,661	1,219	103,880
Pigs	12,502	560	13,062
Total	133,782	2,010	135,792

* Closed on 14th January, 1940.

Instances in which whole carcases and part carcases or organs were condemned and withheld from human consumption owing to *tuberculosis* :—

	Whole Carcases	Part Carcases or Organs	Total	Percentage affected with Tuberculosis
Cows	143	1,615	1,758	*48·2*
Bulls	3	88	91	*33·3*
Heifers	10	440	450	*11·7*
Steers	11	207	218	*6·8*
Calves	22	53	75	*0·9*
Pigs	93	959	1,052	*8·0*

Instances in which whole carcases and part carcases or organs were condemned and withheld from human consumption owing to *diseases other than tuberculosis* :—

	Whole Carcases	Part Carcases or Organs	Total	Percentage affected with Other Diseases
Cows	42	2,574	2,616	*70·5*
Bulls	—	92	92	*33·7*
Heifers	1	1,119	1,120	*29·2*
Steers	—	628	628	*19·6*
Calves	23	49	72	*0·9*
Sheep and Lambs ...	119	7,491	7,610	*7·3*
Pigs	12	895	907	*6·9*

The total weight of diseased or unsound meat surrendered and destroyed was 166 tons 12 cwt. 36 lbs.

Meat Inspection at Private Slaughter-houses.—The number of pigs slaughtered was 4,543. Tuberculosis was found in 105 instances, the proportion being 2·3 per cent. Eight unsound carcases of pork were destroyed. The total weight of unsound meat surrendered and withheld from human consumption was 14 cwt. 74 lb.

Unsound Food Exposed or Intended for Sale.—Sanitary inspectors made 11,310 visits to shops, stores, markets, etc., in connection with inspection of food exposed or intended for sale and food control inquiries.

One hundred and eighty-seven notices were served for the remedy of insanitary conditions in food premises, of which 157 were complied with.

The approximate weight of diseased or unsound food found in shops and stores and destroyed or disposed of by the owners otherwise than as food for human consumption was 334 tons 19 cwt. 30 lb. This is a considerable increase over the amount in previous years and is attributable to war conditions.

Meat Hawkers.—Six certificates for one year were granted under Section 108 of the Cardiff Corporation Act, 1930, to persons not keeping butchers' shops in the city who desired to sell meat or meat products from vehicles, baskets or barrows after approval of their storage accommodation.

Tubercle Bacilli in Milk.—The number of routine samples of milk examined for the presence of tubercle bacilli was 96, of which 3, or 3·1 per cent., were found to be positive. The percentage of samples in which tubercle bacilli were found during the ten years 1930-1939 was 4·4. Appropriate action was taken in each of the cases in which tubercle bacilli were found.

Routine Bacteriological Examination of Milk.—During the year, 308 samples of ordinary commercial milk were submitted for bacteriological examination. Of these, 186, or 60·4 per cent., attained the standard for Tuberculin Tested and Accredited milk.

Graded Milks.—The following is a statement of the numbers of licences for the various grades of milk and the numbers of individual dealers under the Milk (Special Designations) Orders, 1936 and 1938, as at 31st December, 1940 :—

Description	Number
(1) Producers' licences to use the designation " Tuberculin Tested "	2
(2) Producers' licences to use the designation " Accredited "	14
(3) Dealers' licences to use the designation " Tuberculin Tested "—	
(*a*) Bottling establishments....	25
(*b*) Shops	29
(*c*) Supplementary	10
(4) Dealers' licences to use the designation " Accredited "—	
(*a*) Bottling establishments....	9
(*b*) Shops	1
(*c*) Supplementary	2
(5) Dealers' licences to use the designation " Pasteurised "—	
(*a*) Pasteurising establishments	8
(*b*) Shops	21
(6) Individual dealers— ...	
(*a*) Licensed to use the designation " Tuberculin Tested "—	65
(*b*) Licensed to use the designation " Accredited "	22
(*c*) Licensed to use the designation " Pasteurised "	10

The number of samples of Tuberculin Tested and Accredited milk submitted for bacteriological examination during the year was 290, of which 213, or 73·4 per cent., attained the prescribed standard. In addition, 158 samples of Pasteurised milk were examined, of which 143, or 90·5 per cent., attained the prescribed standard for this grade of milk. In every instance of a sample being below standard, steps were taken to ascertain the cause and to effect improvement.

Legal Proceedings.—The following is a summary of legal proceedings taken during the year in connection with food, etc., inspection :—

Acts, etc., under which Proceedings were taken	Number	Fined	Cautioned	To pay costs only	Dismissed	With-drawn	Amount of Fines and Costs
							£ s. d.
Food and Drugs Act, 1938	27	18	2	5	1	1	69 10 3
Milk and Dairies Acts and Orders	4	4	—	—	—	—	5 0 0
Food Control Orders ...	29	15	1	7	5	1	55 0 6
Total	60	37	3	12	6	2	£129 10 9

Report for 1940 *of Mr. S. Dixon, M.Sc., F.I.C., Public Analyst.*

The work carried out during 1940 is summarised in the following table, which shows the total number of samples examined and reported upon and the sources from which they were derived :—

Under the Food and Drugs Act	1,503
Imported Food for the Port Health Authority	8
Under the Fertilisers and Feeding Stuffs Act	21
Under the Rag Flock Acts :—	
(*a*) From upholsterers	8
(*b*) Factory samples	2

For the Public Health Department	....	....	19
For the Central Contracts Committee	....	....	3
For the Public Works Committee	....	....	2
Total	....	....	1,566

FOOD AND DRUGS ACT, 1938, ETC.

It was indicated in the report for 1939 that consideration by the Minister of Health of applications for the introduction of regulations governing the composition of various foods under powers conferred upon him by the Food and Drugs Act, 1938, had been deferred on account of the war, and during 1940 the only Order made by him in this connection (S.R. & O. 1940, No.633) has been to amend the Public Health (Preservatives in Food) Regulations, so as to permit the presence of a limited amount of added sodium or potassium nitrite in bacon, ham and cooked pickled meats.

A considerable number of Statutory Rules and Orders affecting the composition of food, however, has been made under the Defence (General) Regulations, 1939, by the Minister of Food. Among these may be mentioned the following :—

S.R. & O.
1940.

No. 394 Defining varieties of sausages and sausage meat and controlling their meat contents.

,, 547 Permitting under licence the addition of borax to bacon.

,, 606 Defining and fixing certain limits for dripping.

,, 982 Permitting under licence the addition of borax to margarine.

,, 1527 Grading jams and regulating their fruit and sugar contents.

,, 1714 Prohibiting the sale of cream (except for the manufacture of butter) and its use in certain commodities.

,, 1896 Reducing the minimum limits for the fat and total milk solid content of condensed milk.

,, 1912 Controlling the manufacture and sale of milk powder by licence.

,, 2028 Prohibiting the use of milk in the preparation of ice cream except under licence.

,, 2089 Prohibiting the use of milk and milk products in the manufacture of synthetic cream.

From the dates on which these various Orders came into force regard has been paid to them when reporting upon samples submitted under the Food and Drugs Act.

The number and nature of the samples examined and the numbers adulterated or unsatisfactory were as follows :—

Descripton	Number Examined	Number Adulterated or Unsatisfactory
Milk (excluding appeal-to-cow samples)	1,095	104
Appeal-to-cow samples	24	2
Milk, Skimmed	1	—
Butter	78	19
Drugs (10 varieties)	40	2
Other articles (57 varieties)	265	11
Total	1,503	138

Milk.

Of the 1,095 samples of milk taken ordinarily by Sampling Officers, 104, or 9·5 per cent., were returned as adulterated or of unsatisfactory composition. In 1939 the corresponding percentage was 8·6, while in 1938 it was 11·4. The unsatisfactory samples are classified below :—

Nature of Adulteration or Irregularity.	*Number of Samples.*
Contained added water	62
Contained added water and also deficient in fat (after allowance for the added water)	2
Deficient in fat only	40
Total	104

Twenty-four appeal-to-cow samples were procured during the year ; fifteen were morning milk and nine were evening milk. Ten of the samples were somewhat low in non-fatty solids, but the freezing points (Hortvet) of all were normal, ranging from —0·530°C. to −0·548°C., with an average of −0·539°C. Two morning milks obtained from the same source were deficient in fat.

The average composition of all the milk samples examined in 1940 and during the period 1929-1940 is given in the following table :—

Average Composition of all Milk Samples.

Period	No. of Samples	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.
1940	1,119	*3·68*	*8·64*	*12·32*
1929–1940	11,394	*3·74*	*8·77*	*12·51*

Legal proceedings were taken in instances where the results of analysis justified such a course and the decisions are given on page 56.

Articles other than Milk.

Thirty-two, or 8·3 per cent., of the 384 samples other than milk were adulterated or otherwise unsatisfactory.

Forty-seven samples were taken from supplies delivered to institutions belonging to the City Council and were submitted on behalf of the Central Contracts Committee. With the exception of a sample of oxymel of squill, which was deficient in acetic acid, these were satisfactory.

Three samples, consisting of two submitted as butter (both of which proved to consist of margarine) and one of margarine (which was rancid), were received from private purchasers resident in the city.

Particulars of the unsatisfactory samples are tabulated below :—

No. of Sample	Article	Nature of Adulteration or Irregularity
7	Butter	Contained 60 per cent. of margarine
71	,,	,, 45 ,, ,,
72	,,	,, 40 ,, ,,
74	,,	Consisted of margarine
1,127	,,	Consisted of margarine containing 0·21 per cent. of boric acid. (Private sample.)
1,138	,,	Consisted of margarine containing 0·18 per cent. of boric acid. (Private sample.)
867	,,	Rancid. The fat contained 2·9 per cent. of free fatty acids
868	,,	,, ,, ,, 2·5 ,, ,, ,,
870	,,	,, ,, ,, 2·1 ,, ,, ,,
871	,,	,, ,, ,, 2·5 ,, ,, ,,

No. of Sample	Article	Nature of Adulteration or Irregularity
872	Butter	Rancid. The fat contained 2·3 per cent. of free fatty acids
874	,,	,, ,, ,, 1·8 ,, ,, ,,
938	,,	,, ,, ,, 2·0 ,, ,, ,,
944	,,	,, ,, ,, 2·1 ,, ,, ,,
945	,,	,, ,, ,, 3·0 ,, ,, ,,
1,004	,,	,, ,, ,, 2·5 ,, ,, ,,
1,005	,,	,, ,, ,, 1·5 ,, ,, ,,
1,006	,,	,, ,, ,, 2·0 ,, ,, ,,
1,043	,,	,, ,, ,, 2·1 ,, ,, ,,
496	Cheese, Processed	Contained an excess of water (water=45·7 per cent.)
1,445	Cocoa Mixture	Deficient in protein (declared 57 per cent., contained 49·3 per cent.)
212	Cream	Consisted of emulsified margarine fat and contained 0·03 per cent. of boric acid
587	Dripping, Beef	Contained 7·5 per cent. of free fatty acids
1,434	Iodine, Tincture of	Deficient of 31·4 per cent. of iodine and of 34·4 per cent. of potassium iodide
447	Lard	Contained at least 20 per cent. of fat foreign to lard
1,406	Margarine	Rancid. The fat contained 2·3 per cent. of free fatty acids
1,293	Milk, Dried Sweetened	Consisted of dried quarter-cream milk, sweetened with saccharin. Contents of packet stated to be equivalent to 1 pint of sweet milk. Not labelled in accordance with the Dried Milk Regulations
1,405	,, ,,	Consisted of dried quarter-cream milk, sweetened with saccharin. Contents of packet stated to be equivalent to 1 pint of sweet milk, whereas, in fact, they were equal to only 0·44 pint of quarter-cream milk. Not labelled in accordance with the Dried Milk Regulations
623	Oxymel of Squill	Deficient in acetic acid (Contracts Committee sample)
992	Vinegar	Deficient in acetic acid
1,282	,,	,, ,,
1,448	Whiskey	Contained 12·6 per cent. of excess water

Rancidity in Fatty Foods.—Rancidity may be defined as a deterioration in odour and flavour which develops in fats and oils or in the fatty constituents of foodstuffs on keeping, and it may be due to one or more of a variety of causes.

In consequence of a large number of complaints made to the Chief Sanitary Inspector by private individuals and shopkeepers in respect of the taste and odour of butter supplied to them, and of a difference in opinion between officials of the Ministry of Food and of the Public Health Department as to the justification of these complaints, a number of informal samples of butter were submitted for chemical examination. Thirteen samples were reported to be sufficiently unpalatable to render them unfit for ordinary use. They possessed a marked rancid odour and taste, the rancidity being due largely to hydrolytic decomposition of the fat. This results, in the case of butter, in the production of free butyric acid and other volatile acids, which possess a very unpleasant odour and taste and confer these properties on the butter. The free fatty acids in the fat of these samples, calculated, as is usual, in terms of oleic acid, ranged from 1·5 to 3·0 per cent. The normal free fatty acid content of butter-fat, calculated as oleic acid, is about 0·3 per cent., and it certainly should not exceed 1·0 per cent. In seven of these samples there was also evidence of oxidative changes occurring, which also result in the production of objectionable odours and flavours.

In view of these findings, the Ministry of Food arranged for any consignments of butter showing definite evidence of rancidity to be returned to them for replacement.

A sample of beef dripping, taken in consequence of a complaint by a firm that had a large stock of this article, was found to be badly decomposed and unfit for human consumption. It contained 7·5 per cent. of free fatty acids, which is 5·5 per cent. in excess of the limit of 2 per cent. fixed by the Dripping (Maximum Prices) Order, 1940. The sale of this commodity was immediately stopped.

A sample of canned margarine submitted by private purchasers was also rancid. The fat contained 2·3 per cent. of free fatty acids and showed evidence of oxidative changes.

Butter.—Legal proceedings were instituted against the owners of two cafes in respect of the sale of butter supplied with bread rolls. In one case the "butter" contained 60 per cent. of margarine and in the other it consisted entirely of margarine. Each of the vendors was fined £5.

In two other instances the samples submitted as butter contained margarine, but the butter and margarine had been served in separate and differently made-up pats, though at the time no indication was given that margarine also had been supplied in addition to the amount of butter permitted. In each case it appeared that this was an unintentional omission on the part of the waitresses concerned, and cautions were given. At a subsequent visit to these cafes there was no further cause for complaint.

Cream.—An informal sample of cream taken at a store, following a complaint by the manager that the cream supplied to him in cartons labelled "pure rich cream" did not appear to be of the standard normally received, was found to consist of a cream substitute made by emulsifying margarine fat with milk. It also contained boric acid, the presence of which is prohibited by the Preservatives in Food Regulations. A formal sample was taken subsequently from the suppliers, in course of delivery to this store, but this proved to be genuine cream free from preservatives. Further samples taken from this and other sources also were genuine.

Lard and Sweetened Milk Powder.—These were unusual cases of interest both from the analytical and legal points of view. They received considerable publicity and an account of the legal proceedings appeared in the *British Food Journal*—Lard, 1940, p. 65; Sweetened Milk Powder, 1941, p. 27.

ADMINISTRATIVE ACTION.

The following table shows the results of legal proceedings taken in respect of samples *obtained* during the year :—

No. of Sample	Article	Result of Analysis	Result of Proceedings	
			Fine	Costs
233	Milk	Contained 9% of added water	£3	
253	,,	,, 10% ,, ,,	£3	14s. 9d.
414	,,	,, 10% ,, ,,	£8	£2 11s. 0d.
415	,,	,, 12% ,, ,,		
767	,,	,, 25% ,, ,,	£5	
825	,,	,, 6% ,, ,,	£6	£2 0s. 6d.
826	,,	,, 8% ,, ,,		
907	,,	,, 4% ,, ,,	£3	£1 10s. 0d.
908	,,	,, 6% ,, ,,		
1,044	,,	,, 20% ,, ,,	£4	£2 0s. 0d.
1,322	,,	,, 44% ,, ,,	£20	£1 0s. 0d.
1,326	,,	,, 16% ,, ,,	£36	£4 0s. 0d.
1,329	,,	,, 10% ,, ,,		
1,330	,,	,, 17% ,, ,,		
1,331	,,	,, 7% ,, ,,		
1,332	,,	,, 3% ,, ,,		
1,333	,,	,, 27% ,, ,,		
1,339	,,	,, 17% ,, ,,		
1,343	,,	,, 8% ,, ,,		
1,382	,,	,, 6% ,, ,,		
1,383	,,	,, 2% ,, ,,		
1,385	,,	,, 8% ,, ,,		
1,386	,,	,, 2% ,, ,,		
7	Butter	Contained 60% of margarine	£5	
74	,,	Consisted of margarine	£5	4s. 0d.
447	Lard	Contained at least 20% of foreign fat	£2	4s. 0d.
1,405	Sweetened Milk Powder	Consisted of dried quarter-cream milk sweetened with saccharin. Contents not as declared. Not labelled as prescribed	£1	
1,434	Iodine, Tincture of	Deficient of 31·4% of iodine and of 34·4% of potassium iodide	—	£3 3s. 0d.
992	Vinegar	Deficient of 22% acetic acid	£1	
1,448	Whiskey	Contained 12·6% excess water	—	£3 3s. 0d.
		Total ...	£102	£20 10s. 3d.

Appropriate action was taken in other cases where the samples were returned as adulterated or of unsatisfactory composition.

Imported Food.

Eight samples of imported food, consisting of sultanas (6), oranges and tomato purée, examined for the Port Health Authority were satisfactory. All the sultanas were free from sulphur dioxide. The oranges were free from boric acid, and, although they were dyed, a prohibited colouring matter had not been used. The copper content of the tomato purée was well below the limit of 100 parts per million parts of dry matter adopted provisionally by Port Medical Officers. A sample of this same brand taken upon importation in 1938 was heavily contaminated with copper, and the improvement effected is shown by the following figures relating to these two samples :—

1938 — Copper — 229 parts per million parts of dry matter.
1940 — Copper — 65 ,, ,, ,, ,,

Fertilisers and Feeding Stuffs Act, 1926.

Two samples of fertilisers and 19 of feeding stuffs were submitted under this Act. Although there were discrepancies in six of the feeding stuffs between certain of the results found and the figures guaranteed, these were not serious and, having regard to the conditions under which manufacturers of feeding stuffs are now working, no further action was considered necessary.

Rag Flock Acts, 1911 and 1928.

Eight samples of rag flock obtained from upholsterers and two taken at a flock factory conformed to the standard of cleanliness prescribed by the Rag Flock Regulations.

Miscellaneous Samples.

Public Health Department.—The articles examined consisted of brawn, bread (5), cider, a medicinal powder, milk (3), preserving fluid, faeces, urine, together with five specimens of materials suspected of having been dropped from enemy aircraft. The latter were all inorganic in nature and were innocuous. The sample of urine contained 0·37 part of lead per million, an amount which is considerably in excess of the normal lead content of urine, and which supported the clinical suspicions that the patient was suffering from chronic lead poisoning.

Central Contracts Committee.—In addition to samples of milk and of other foodstuffs taken from supplies delivered to institutions belonging to the City Council, and which are now merged with those taken under the Food and Drugs Act, samples of soap powder, pale yellow soap and carbolic soap were submitted on behalf of the Committee. The soaps complied with the specifications for these articles, but the soap powder was deficient in soap and contained water in excess of the amount specified.

Public Works Committee.—Samples of white lead and carbolic soap submitted by the City Engineer were satisfactory.

XVI.—HOUSING.

The following statement gives particulars in relation to housing for 1940 :—

1. *Inspection of Dwelling-houses during the Year* :—

(1)	(*a*)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	3,509
	(*b*)	Number of inspections made for the purpose	8,229*
(2)	(*a*)	Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932	30
	(*b*)	Number of inspections made for the purpose	147*
(3)		Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	—

* Including re-inspections.

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 935

2. *Remedy of Defects during the Year without Service of Formal Notices* :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 483

3. *Action under Statutory Powers during the Year* :—

(*a*)—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. . 92

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(*a*) By owners 71

(*b*) By Local Authority in default of owners .. 1

(*b*)—Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied . 175

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(*a*) By owners 128

(*b*) By Local Authority in default of owners .... —

(*c*)—Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—

(1) Number of dwelling-houses in respect of which Demolition Orders were made .. . . . —

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders .... —

(*d*) Proceedings under Section 12 of the Housing Act, 1936 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made .. . —

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit .... —

Council Housing Estates.—The following is a record of the work done by the inspector who is responsible for the sanitary condition of the Corporation housing estates :—

Routine initial inspections	183
Vacant houses inspected	358
Visits regarding exchanges and transfers	148
Visits regarding vermin, cleansing, overcrowding, etc.	273
Visits regarding rats, poultry, trading, etc.	132
Following-up visits	424
Visits to families prior to rehousing in Council houses	33
Other visits (Estate depots, etc.)	1,042
Total	2,593

Of the vacant houses inspected (358), 48 (13·4 per cent.) were found to be infested with bed-bugs.

Bed-bugs.—In addition to the vacant Council houses referred to above, 13 privately owned houses were found to show evidence of infestation with bed-bugs. The methods used for the eradication of bed-bugs were fully described in the report for 1937.

XVII.—GENERAL SANITARY ADMINISTRATION.

General Sanitary Inspection.—The number of complaints of nuisances received and dealt with was 2,001.

The numbers of inspections and visits made by sanitary inspectors, the numbers of notices served and the numbers of notices complied with were as follows :—

	Inspections or Visits	Intimation Notices		Satutory Notices	
		Served during year	Complied with during the year	Served during the year	Complied with during the year
Houses	3,509	908	463	175	128
Re-inspections of houses	4,720	—	—	—	—
Houses inspected and recorded	30	27	20	8	5
Re-inspections of recorded houses	1,449	—	—	—	—
Milkshops, etc.	1,328	28	16	—	—
Cowsheds	162	32	17	—	—
Offensive trades	64	—	—	—	—
Non-mechanical factories	472	14	5	2	—
Mechanical factories	508	12	5	—	—
Workplaces	168	8	—	—	—
Outworkers' premises	8	—	—	—	—
Seamen's lodging houses :—					
Day	511	61	53	—	—
Night	68	—		—	—
Common lodging houses :—			—		
Day	27	—	—	—	—
Night	—	—	—	—	—
Other premises, et	7,222	267	251	—	—

The number of drains tested was 364 (198 with smoke and 166 with chemicals.

The following is a summary of nuisances abated, repairs executed, etc., under the supervision of sanitary inspectors :—

At or in connection with :—

Houses	4,033
Seamen's lodging houses	350
Amusement places	5
Ice-cream premises	11
Fried fish shops	39
Other food shops, kitchens, etc.	215
Dairies, cowsheds and milkshops	58
Offensive trades	3
Stables	10
Back lanes	5
Drainage	1,751
Cesspools	4
Urinals	2
Earth or pail closets	2
Eradication of bed-bugs (excluding Council houses)	12
Miscellaneous premises	22
Total	6,522

Common Lodging Houses.—There are five registered common lodging houses, two of them being of large type.

Seamen's Lodging Houses.—There are 53 licensed seamen's lodging houses.

Drainage and Sewerage.—The City Engineer has reported that all works in connection with drainage and sewerage have been maintained satisfactorily during 1940. The construction of the relief sewer and pumping plant at Ely, which was referred to in the last annual report, has been completed and has proved to be of considerable value in the prevention of flooding in the western area of the city.

Water Supply.—The Water Engineer has reported that the necessary precautions for ensuring the continuance and purity of the public water supply under war conditions have been taken.

Rat Destruction.—The following is a summary of the work of the department in connection with the destruction of rats :—

Amount of poison sold (tins)	152
Number of baits laid in public sewers	3,070
Number of baits eaten	965
Number of baits laid elsewhere	32,296
Number of baits eaten	27,142
Total number of baits laid	35,366
Total number of baits eaten	28,107

During the year, 2,490 rats were caught in traps set by the rat-catcher.

Factories and Workplaces.—Details of the sanitary inspection of factories and workplaces under the Factories Act, 1937, are given in the following tables :—

1.—Inspections for Purposes of Provisions as to Health.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
Factories with mechanical power	438	12	—
Factories without mechanical power	422	14	—
Other premises (not including outworkers' premises)	168	8	—
Total	1,028	34	—

2.—Defects Found

Particulars	Number of Defects	
	Found	Remedied
Nuisances under the Public Health Acts :—		
Want of cleanliness	44	23
Overcrowding	1	—
Sanitary accommodation — insufficient	6	5
Sanitary accommodation — unsuitable or defective	5	3
Sanitary accommodation — not separate for sexes	2	1
Other offences	7	4
Total	65	36

3.—Outwork.

Nature of Work	Outworkers' Lists, Section 110							Outwork in Unwholesome Premises, Section 111	
	Lists received from Employers						Notices served on Occupiers as to keeping or sending lists		
	Sending twice in the year			Sending once in the year					
	Lists	Outworkers		Lists	Outworkers			In-stances	Notices served
		Con-tractors	Work-men		Con-tractors	Work-men			
Making, etc., of wearing apparel ...	5	—	20	11	—	33	17	—	—

4.—Other Matters.

Class	Number
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factories Act	—
Action taken in matters referred by H.M. Inspectors :—	
Notified by H.M. Inspector	1
Reports (of action taken) sent to H.M. Inspector	1
Other (Notices of Occupation of Non-mechanical Factories received from H.M. Inspector)	25
Underground Bakehouses in use at the end of the year	—

Pharmacy and Poisons Act, 1933.—During the year, 116 licences were renewed and 8 new licences were issued.

Legal Proceedings.—The following is a summary of legal proceedings taken during the year in connection with general sanitary administration :—

Acts, etc., under which proceedings were taken	Number	Fined	Cautioned	To pay costs only	Dismissed	With-drawn	Amount of Fines and Costs
							£ s. d.
Shops Acts	6	4	1	1	—	—	2 1 6
Public Health Act, 1936	4	—	—	4	—	—	1 13 6
Housing Act, 1936	2	1	—	1	—	—	1 2 6
Merchant Shipping Act, 1894 (Sec. 214, Sub-sec. 5)	4	3	1	—	—	—	2 0 0
Total	16	8	2	6	—	—	£6 17 6

XVIII.—ATMOSPHERIC POLLUTION.

This section is compiled from data supplied by Mr. J. H. Sugden, M.Sc., F.I.C., of the Cardiff and County Public Health Laboratory, under whose direction the analyses and measurements are undertaken.

Deposit Gauge.—Atmospheric pollution observations made with a deposit gauge in Cardiff during 1940 are given in the following table :—

Month	Rainfall (mm.)	Deposit in Tons per Square Mile		
		Insoluble Deposit	Soluble Deposit	Total Solids
January*	—	—	—	—
February	85	14·27	6·92	21·19
March	84	7·53	6·95	14·48
April	74	9·39	7·80	17·19
May	61	7·90	4·68	12·58
June	18	9·42	3·83	13·25
July	113	6·55	7·36	13·91
August	6	4·88	2·07	6·95
September	41	5·15	5·83	10·98
October	144	8·61	9·32	17·93
November	144	7·09	22·61	29·70
December	57	5·46	6·03	11·49

* Gauge out of order.

Sulphur Pollution.—The amount of atmospheric sulphur dioxide is measured by the lead peroxide method in Splott—a municipal ward in which iron and steel works are situated—and at the City Hall. The results, together with the calculated approximate volumes per million of air, for 1940 are tabulated as follows :—

Month	Main direction of Wind	Milligrams SO_3 per 100 sq. cm. per day			Calculated volume SO_2 per million of air		
		Splott	City Hall	Difference	Splott	City Hall	Difference
January	To works	2·54	1·99	0·55	0·070	0·055	0·015
February	From works	2·66	1·68	0·98	0·074	0·047	0·027
March	To works	3·13	1·22	1·91	0·087	0·034	0·053
April	—	3·60	1·09	2·51	0·100	0·030	0·070
May	To works	2·65	0·77	1·88	0·074	0·021	0·053
June	—	2·41	0·60	1·81	0·067	0·017	0·050
July	From works	3·33	0·50	2·83	0·092	0·014	0·078
August	—	3·85	0·55	3·30	0·107	0·015	0·092
September	To works	3·49	0·67	2·82	0·097	0·019	0·078
October	,, ,,	2·38	1·28	1·10	0·066	0·035	0·031
November	From works	3·88	1·49	2·39	0·108	0·041	0·067
December	—	3·89	1·59	2·30	0·108	0·044	0·064

Ultra-Violet Radiation.—The mean daily units of ultra-violet radiation, as measured by the acetone methylene blue method, in Cardiff during 1940 were as follows :—

Month	Mean Daily Radiation Units	
	Penylan (Suburban)	City Hall (Central)
January	0·24	0·24
February	0·33	0·33
March	0·71	0·71
April	0·95	0·90
May	1·73	1·70
June	2·37	2·35
July	1·98	2·02
August	1·48	1·48
September	0·93	0·96
October	0·26	0·26
November	0·16	0·16
December	0·15	0·15

XIX.—METEOROLOGICAL OBSERVATIONS.

The geographical position of the Meteorological Station, which is situated at Penylan, Cardiff, is Latitude 51° 30′N., Longitude 3° 10′W., and the height of the Station above mean sea level is 203 feet. Observations are made daily at 9.0 a.m. and 9.0 p.m. (G.M.T.). Summaries of the observations made during 1940 are given in the following tables :—

Barometric Pressure and Relative Humidity.

Month	Attached Thermometer (Mean)	Mean Barometric Pressure*		Hygrometer*		
		Uncorrected	Reduced to Mean Sea Level and Temp. 32° F.	Dry Bulb (Mean)	Wet Bulb (Mean)	Mean Relative Humidity
	°F.	Inches.	Inches.	°F.	°F.	%
January	33	29·834	30·086	32·1	30·9	*84*
February	38	29·641	29·875	38·4	37·4	*91*
March	44	29·714	29·930	42·9	40·6	*81*
April	49	29·726	29·926	47·7	45·6	*84*
May	57	29·851	30·027	55·4	52·0	*79*
June	65	29·940	30·091	62·4	57·5	*72*
July	62	29·776	29·930	59·5	56·6	*83*
August	63	30·036	30·194	61·4	57·3	*77*
September	58	29·873	30·045	57·0	53·2	*77*
October	51	29·671	29·667	49·8	47·8	*86*
November	46	29·482	29·766	45·5	43·8	*88*
December	41	29·921	30·127	40·5	38·9	*88*
	51	29·789	29·972	49·4	46·8	*83*

* From observations at 9 a.m. and 9 p.m. (G.M.T.)

Temperature.

Month	Absolute Maximum	Absolute Minimum	Mean of Maximum	Mean of Minimum	Mean Temperature	Difference from Average (51 years
	°F.	°F.	°F.	°F.	°F.	°F.
January	51	5	37·2	26·9	32·1	— 8·2
February	56	21	43·2	34·3	38·8	— 1·6
March	59	24	51·2	37·5	44·4	+ 1·8
April	71	31	56·0	41·4	48·7	+ 2·2
May	69	41	63·9	46·6	55·8	+ 3·1
June	85	47	71·2	52·8	62·0	+ 4·5
July	77	45	67·0	52·4	59·7	— 1·0
August	79	46	69·5	54·0	61·8	+ 1·2
September	83	42	65·3	48·4	56·8	+ 0·2
October	68	37	56·9	45·7	51·3	+ 0·9
November	57	28	52·3	40·9	46·6	+ 2·2
December	54	29	46·0	36·7	41·3	+ 0·3
	85	5	56·6	43·1	49·9	+ 0·4

Terrestrial Radiation, Underground Temperature and Sunshine.

Month	Temperature: Grass Minimum (Mean)	Temperature: Underground (Mean) 1 ft.	Temperature: Underground (Mean) 4 ft.	Bright Sunshine: Total Duration	Bright Sunshine: Difference from Average (32 years)
	°F.	°F.	°F.	Hours	Hours
January	25·8	35·0	42·9	82·1	+ 29·9
February	33·3	37·0	40·3	27·0	— 48·4
March	35·3	42·3	43·0	138·2	+ 21·0
April	41·7	48·4	46·4	133·2	— 33·6
May	46·1	56·8	51·5	211·7	+ 10·2
June	52·3	63·4	56·9	288·5	+ 70·8
July	53·0	62·9	59·0	200·3	— 1·2
August	53·9	63·0	59·9	230·3	+ 43·6
September	48·3	58·6	59·3	198·5	+ 51·2
October	42·0	51·7	55·4	91·1	— 14·9
November	45·7	46·6	51·3	78·5	+ 14·2
December	31·6	40·8	47·3	50·7	+ 1·5
	42·4	50·5	51·1	1,730·1	+144·3

* = 38·8 % of possible duration and a daily average of 4·73 hours.

Rainfall.

Month	Total	Difference from Average (51 years)	Greatest Fall in 24 hours*: Amount	Greatest Fall in 24 hours*: Day	Number of Rain-days (0·01 inch or more)	Duration
	Inches	Inches	Inches			Hours
January	3·87	— 0·19	1·16	26th	9	80·75
February	3·47	+ 0·49	0·76	6th	17	61·00
March	3·43	+ 0·52	0·74	17th	15	66·50
April	2·76	+ 0·07	0·50	18th	21	53·25
May	2·39	— 0·17	0·64	15th	11	26·00
June	0·96	— 1·62	0·44	21st	6	8·25
July	4·92	+ 1·86	1·59	19th	16	55·75
August	0·20	— 3·73	0·08	9th	7	3·00
September	1·30	— 1·79	0·32	19th	11	20·00
October	5·75	+ 0·91	1·10	9th	18	55·75
November	8·54	+ 4·61	1·48	11th	21	100·00
December	2·55	— 2·03	0·66	14th	19	38·00
	40·14	— 1·07	1·59	19th July	171	568·25

* 24 hours ended 9 a.m. (G.M.T.) next day.

XX.—MISCELLANY.

Home Nursing of Pneumonia.—The following is a summary of the work done by nurses of the Queen's Institute of District Nursing in connection with the arrangement whereby the Institute undertakes the home nursing of cases of pneumonia :—

Cases referred for nursing during the year 61

Visits made during the year 651

Home Nursing of the Sick Poor.—The following is a summary of the work done in connection with the home nursing of the sick poor by nurses of the Queen's Institute of District Nursing :—

Cases referred for nursing during the year 158

Visits made during the year 13,656

Disinfection.—Disinfection was carried out at 382 houses during the year, and 17,467 articles of bedding, clothing, etc., were removed to and disinfected at the Disinfecting Station ; 304 infected articles were destroyed by arrangement with or at the request of owners.

Cleansing Station.—The total number of baths for scabies, pediculosis, etc., undertaken at the Cleansing Station was 1,220.

Public Mortuary.—One hundred and fifty-five bodies (119 males, 36 females) were taken to the Public Mortuary and 59 post-mortem examinations were performed there.

PORT HEALTH SERVICE.

As for 1939, this report for 1940 is in an abbreviated form, in accordance with the requirements of the Minister of Health during the present war.

I.—CONSTITUTION, LIMITS OF JURISDICTION, ETC., OF THE CARDIFF PORT HEALTH AUTHORITY.

Full particulars regarding the constitution of the Cardiff Port Health Authority and their duties, powers and limits of jurisdiction were given in the report for 1938.

II.—INSPECTION OF SHIPPING.

The following table shows the number of vessels (foreign and coastwise) inspected by officers of the Port Health Authority, the number reported to be defective, the number on which defects were remedied and the number reported as having or having had during the voyage infectious disease on board during 1940 :—

Number Inspected by		Number reported Defective	Number on which Defects were Remedied	Number reported as having or having had during the voyage Infectious Disease on Board
Medical Officer	Sanitary Inspector			
43	1,245	553	422	44

III.—CHARACTER OF TRADE.

In peace-time passenger traffic is small and casual and exports exceed imports, the principal exports being coal, coke and patent fuel ; other exports are flour, oil, cement, ironwork and tinplates. Imports comprise iron-ore, pitwood, grain, fruit, vegetables and provisions.

IV.—WATER SUPPLY.

A description of the water supply and arrangements for its supply to ships was given in the report for 1938.

During 1940, 89 samples of drinking water from ships were submitted to the Cardiff and County Public Health Laboratory for bacteriological examination. The results of the examinations were as follows :—

Satisfactory	....	....	75
Of moderate purity	....	....	6
Of doubtful purity	....	....	5
Contaminated	....	....	3
Total	....	....	89

Notices were served upon the masters of the eight ships having contaminated water or water of doubtful purity on board, and in all instances the tanks were emptied, cleansed and refilled at this port.

V.—INFECTIOUS DISEASES.

The following table shows the nature of 55 cases of notifiable infectious diseases landed from vessels during the year :—

Disease	Number of Cases		Number of Vessels concerned
	Passengers	Crew	
Scarlet Fever	—	1	1
Diphtheria	—	5	5
Measles	—	3	3
Acute Pneumonia ..	—	4	4
Cerebro-spinal Fever ...	—	2	2
Enteric Fever	—	1	1
Erysipelas	—	1	1
Malaria	—	30	14
Tuberculosis	—	8	8

The cases referred to in the above table were dealt with as follows :—

Disease	Admitted to City Isolation Hospital	Admitted to Royal Hamadryad Seamen's Hospital	Admitted to City Lodge Hospital	Allowed to return home	Treated aboard Ship	Total
Scarlet Fever ...	1	—	—	—	—	1
Diphtheria	5	—	—	—	—	5
Measles .. .	3	—	—	—	—	3
Acute Pneumonia ...	—	3	—	—	1	4
Cerebro-spinal Fever	2	—	—	—	—	2
Enteric Fever	1	—	—	—	—	1
Erysipelas	1	—	—	—	—	1
Malaria	1	22	—	4	3	30
Tuberculosis	—	4	2	2	—	8
Total	14	29	2	6	4	55

Twenty other cases of infectious disease which were dealt with by the port health staff were found to fall properly within the province of urban administration and were therefore referred to the districts to which they belonged, as follows :—

Disease	Cardiff	Barry	Total
Diphtheria	—	1	1
Enteric Fever	—	2	2
Malaria	8	1	9
Tuberculosis	6	2	8
Total	14	6	20

Twelve cases of infectious disease, as follows, were reported to have occurred on five vessels during the voyage and were disposed of prior to arrival at Cardiff :—

Disease	Number of Cases		Number of Vessels concerned
	Passengers	Crew	
Malaria	—	11	4
Tuberculosis	—	1	1

Cleansing and Disinfection.—One hundred and ninety seamen who were discovered to be suffering from scabies were treated at the Cleansing Station belonging to the Cardiff City Council, their clothing being disinfected at the Disinfecting Station, which is situated adjacently. One hundred and seventy-seven vessels were found to be infested with bed-bugs, and notices were served upon the masters requiring them to take all necessary steps to eradicate the insects. Verminous or infected beds to the number of 674 were destroyed.

Venereal Diseases.—The numbers of cases of venereal disease dealt with at the special treatment centre for seamen at the Royal Hamadryad Seamen's Hospital during the year were as follows :—

Persons attending at the Centre for the First Time					Total Attendances	Aggregate Number of In-patient Days
Syphilis	Soft Chancre	Gonorrhoea	Non-Venereal and undiagnosed Conditions	Total		
144	90	389	34	657	8,326	1,817

Thirty-nine cases of venereal disease came to the knowledge of officers of the Authority during the year and were recommended for treatment at the centre.

Psittacosis.—Twenty-nine parrots were dealt with under the Parrots (Prohibition of Import) Regulations, 1930, with the object of preventing the introduction of psittacosis.

VI.—MEASURES AGAINST RODENTS.

Fumigation of vessels by sulphur dioxide or hydrocyanic acid gas was carried out by private contractors under the supervision of officers of the Port Health Authority in 62 instances. The number of rats destroyed by fumigation was 817 (an average of 13·2 per vessel), of which 172 were submitted to the Cardiff and County Public Health Laboratory for examination for the detection of plague.

The numbers of deratisation certificates and deratisation exemption certificates issued were 62 and 224 respectively—a total of 286. The fees received by the Port Health Authority in respect of these certificates amounted to £597 9s. 0d.

A rat-catcher is employed on all vessels from plague-infected ports and on all grain-laden vessels arriving at the port. By this means 307 rats were caught, 56 of which were examined for plague.

Extensive baiting is systematically carried out around the docks by the dock owners (the Great Western Railway Company) and by occupiers of premises in the vicinity of the docks under the supervision of officers of the Authority. The number of poison baits laid was 262,644, and 1,951 rats and 738 mice were found dead as a result of these measures.

For the purpose of surveying the area around the docks for rats, the district is divided into four areas. Traps are set by the rat-catcher for one week in each area. Sixty-four rats were caught under this scheme, of which 13 were examined for plague.

The following tabular statements give information in the form required by the Minister of Health as to the number of rats destroyed, the measures of rat destruction on plague "infected" or "suspected" vessels or vessels from plague-infected ports, and deratisation certificates and deratisation exemption certificates issued.

Rats destroyed :—

	On Vessels	Docks, Quays, Wharves and Warehouses
Rats destroyed	1,124	2,015
Rats examined	228	13
Rats infected with plague ...	—	—

Measures of rat destruction on plague "infected" or "suspected" vessels from plague-infected ports arriving in the port during the year :—

Total number of such Vessels arriving	41
Number of such Vessels fumigated by SO_2	3
Number of Rats killed	256
Number of such Vessels fumigated by HCN	1
Number of Rats killed	26
Number of such Vessels on which trapping, poisoning, etc., were employed	7*
Number of Rats killed	159
Number of such Vessels on which measures of Rat destruction were not carried out	33

* Two of these were also fumigated by SO_2 and one by HCN.

Deratisation certificates and deratisation exemption certificates issued during the year :—

Number of Vessels		286
Number of Deratisation Certificates issued :—		
After fumigation with—		
HCN	15	
SO_2	46	
HCN and SO_2	1	
After Trapping, Poisoning, etc.	—	
	——	62
Number of Deratisation Exemption Certificates issued		224
Total Certificates issued		286

VII.—HYGIENE OF CREW SPACES, ETC.

The following is a classification of the nuisances discovered during the year :—

Nationality of Vessel	Number inspected during the Year	Defects of Original Construction	Structural Defects through Wear and Tear	Dirt, Vermin and Other Conditions prejudicial to Health
British	803	96	923	983
Other Nations	442	161	338	223

The following table shows the number of the defects referred to in the preceding table which were remedied at this port :—

Nationality of Vessel	Defects of Original Construction	Structural Defects through Wear and Tear	Dirt, Vermin and Other Conditions prejudicial to Health
British	25	886	980
Other Nations	31	325	221

The defects and nuisances discovered during 1940 were as follows :—

Insufficient ventilation	37
,, lighting	5
Obsolete privies	117
Privies without water service	80
Ventilators over bunks	18
Defective ventilators	47
,, skylights and deck-lights	19
,, steam heaters, stoves, stove-pipes, etc.	215
,, sanitary conveniences, flushes, etc.	224
,, side ports, deck-prisms, etc.	311
,, bulkheads	25
,, floors	41
,, doors	47
,, bunks and bedsteads	55
,, food-lockers	18
,, baths, wash-hand basins and waste-pipes	44
,, drain-pipes	17
,, cable casings	17
,, hawse-pipes	27
Leaking decks	154
Verminous crew quarters	336
Dirty crew quarters	445
,, messrooms	57
,, food-lockers	39
,, sanitary conveniences	183
,, bathrooms and wash-houses	71
,, fresh-water tanks	16
Foul bilges	4
Foul accumulations	33
Miscellaneous	22
Total	2,724

VIII.—FOOD INSPECTION.

The Public Health (Imported Food) Regulations, 1937, and the Public Health (Preservatives, etc., in Food) Regulations, 1925-1940.—The procedure adopted in connection with the examination of imported foodstuffs and the rigid methods of examination, which have been described in previous annual reports, were continued during 1940.

The total quantity of various kinds of unsound foodstuffs withheld from human consumption during the year amounted to 471 tons 18 cwt. 110 lb.

Eight samples of imported food were submitted to the Public Analyst for analysis, as follows :—

Oranges	1
Sultanas	6
Tomato Purée	1

Each of the samples was reported to be genuine or to contain preservatives within the limits prescribed in the Public Health (Preservatives, etc., in Food) Regulations.

Public Health (Imported Milk) Regulations, 1926.—No fresh milk was imported during the year.

Public Health (Shell-fish) Regulations, 1934.—There are no shell-fish beds or layings within the area under the jurisdiction of the Cardiff Port Health Authority.

IX.—MISCELLANY.

Medical Inspection of Aliens.—The following is a summary of the work done during the year in connection with the medical inspection of aliens :—

	Number.	*Number Inspected by Medical Inspectors.*
Aliens (passengers) landing at the port	349	74
Aliens refused permission to land by Immigration Officer	36	—
Total	385	74

Number of vessels carrying alien passengers	50
Number of such vessels dealt with by the Medical Inspector	6

Analysis of aliens landing :—		
Visitors		8
Business		2
Diplomatic		1
Seamen		47
Aliens coming to settle not holding Ministry of Labour permits :—		
Males	148	
Females	95	
Children	48	
		291
Total		349

Of the 74 aliens medically inspected, 33, who intended taking up employment and remaining in the country over three months, were referred by the Immigration Officer for detailed medical examination.

The Dangerous Drugs (Consolidation) Regulations, 1928.—Five certificates were issued authorising masters of foreign ships to purchase dangerous drugs.

Diseases of Animals Acts, etc.—The various orders under the Diseases of Animals Acts with reference to the importation of animals were strictly enforced during the year. One hundred and seventy-five dogs, 476 cats, five pigs, six sheep and one goat were brought to the port on vessels. All the vessels were visited regularly during their stay in port to ensure that the requirements of the orders were observed.

Legal proceedings were taken against the masters of two vessels for infringements of the Animals (Importation) Order, 1930, a fine of £3 and costs (3/6d.) being imposed in each case. Legal proceedings were also taken against a first mate for an infringement of the Importation of Dogs and Cats Order, 1928, a fine of £2 being imposed.

Seventy-seven calves and 1,378 head of cattle were landed at the Imported Animals Wharf from Canada during the year.

Canal Boats.—The Chief Port Sanitary Inspector, who is also Inspector of Canal Boats, made 63 inspections of canal boats during the year and found infringements of the Canal Boats Regulations regarding painting in eight instances. Verbal instructions were given, and the infringements in each case were remedied. The number of boats (not propelled by motor) on the register was six, each with accommodation for two males.

SCHOOL MEDICAL SERVICE.

Owing to urgent need for economy, the Board of Education have requested that the report for 1940 should be confined tc certain salient facts. This report, therefore, although containing most of the usual statistics which it is believed will be useful for comparative purposes, is reduced in scope, observations under several of the usual headings, where there have been no changes, being omitted altogether.

I.—STAFF.

The under-named members of the staff left for temporary military service and the vacancies were filled temporarily : Dr. A. J. Thomas, Assistant Medical Officer, on 8th June, 1940, Miss L. E. Hughes, School Nurse, on 10th March, 1940, and Mr. W. C. Alder, Clerk, on 13th June, 1940.

Other staff changes that occurred during the year were in the personnel of the three part-time Assistant Medical Officers.

II.—MEDICAL INSPECTION.

Owing to difficulties arising out of war conditions, it was not possible to carry out all the usual routine medical inspections of school children, about 3,000 children in the second age group and 600 in the third age group remaining to be inspected at the end of the year.

The average number of school children and the average attendance during 1940 were as follows :—

	Average Number on Registers	Average Attendance
Elementary Schools	28,340	24,241
Special Day Schools	355	247
Total	28,695	24,488

The numbers of elementary school children inspected at routine medical inspections at schools were as follows :—

	Boys	Girls	Total
Entrants (within 12 months of admission)	530	524	1,054
Second Age Group (8 to 9 years)	628	588	1,216
Third Age Group (over 12 years)	738	1,178	1,916
Other Routine Inspections	84	79	163
Total	1,980	2,369	4,349

The number of elementary school children specially inspected and the number of re-inspections undertaken were as follows :—

		Boys	Girls	Total
Special Inspections	At School	103	109	212
	At School Clinic	2,124	2,594	4,718
	Total	2,227	2,703	4,930
Re-inspections	At School	121	110	231
	At School Clinic	2,190	2,738	4,928
	Total	2,311	2,848	5,159

III.—FINDINGS OF MEDICAL INSPECTION.

Details of the diseases and defects found by routine and special medical inspections are given in Table IIA, page 94. Of the 4,349 school children inspected at routine inspections, 908, or 20·9 per cent., were found to require treatment (excluding defects of nutrition, uncleanliness and dental disease). The percentages of the three groups requiring treatment, as compared with the percentages for the previous four years, were as follows :—

Age Group	Percentage of Children found to require Treatment				
	1936	1937	1938	1939	1940
Entrants (within 12 months of admission)	*17·6*	*19·8*	*15·5*	*13·0*	*17·4*
Second Age Group (8 to 9 years)	*19·0*	*22·3*	*20·0*	*18·5*	*21·5*
Third Age Group (over 12 years)	*20·2*	*23·3*	*20·3*	*17·8*	*22·0*

Of the 4,930 individual children specially inspected, 2,793, or 56·6 per cent., were found to require treatment (excluding defects of nutrition, uncleanliness and dental disease), as compared with a percentage of 58·7 in 1939.

The number and proportion of elementary school children in whom diseases or defects requiring treatment or to be kept under observation were found are shown in the following table :—

Diseases or Defects	Diseases or Defects found at Routine Inspection		Diseases or Defects found at Special Inspection	
	Number	Percentage	Number	Percentage
Skin diseases	75	*1·72*	1,240	*25·15*
Defective vision and squint	388	*8·92*	136	*2·76*
External eye diseases	16	*0·37*	61	*1·23*
Defective hearing	29	*0·66*	44	*0·89*
Other ear diseases	33	*0·76*	119	*2·41*
Chronic tonsillitis	216	*4·96*	142	*2·88*
Adenoids only	7	*0·16*	13	*0·26*
Chronic tonsillitis and adenoids	21	*0·48*	46	*0·93*
Other nose and throat defects	20	*0·46*	156	*3·16*
Enlarged cervical glands	42	*0·96*	63	*1·27*
Defective speech	12	*0·27*	10	*0·20*
Diseases of the heart and circulation	115	*2·64*	269	*5·45*
Non-tuberculous diseases of the lungs	60	*1·38*	245	*4·97*
All forms of tuberculosis (including suspects)	13	*0·30*	27	*0·54*
Diseases of the nervous system	32	*0·73*	128	*2·59*
Deformities	44	*1·01*	54	*1·09*
Other diseases and defects (excluding defects of nutrition, uncleanliness and dental disease)	214	*4·92*	1,097	*22·25*

Nutrition.—The nutrition of children inspected in the routine age groups is classified in detail in Table IIB, page 95. This is the sixth year for the nutrition of children to be classified in this way, and it will be seen from the following table that the percentages of children in the several categories have varied but little since 1935 :—

Year	A (Excellent)	B (Normal)	C (Slightly Subnormal).	D (Bad)
1935	*3·5*	*88·0*	*6·0*	*2·2*
1936	*2·7*	*90·6*	*5·1*	*1·6*
1937	*0·7*	*92·6*	*5·2*	*1·5*
1938	*0·5*	*92·6*	*5·5*	*1·4*
1939	*1·0*	*93·8*	*4·0*	*1·2*
1940	*3·0*	*88·0*	*6·5*	*2·5*

A routine nutritional survey of elementary school children was commenced in September, 1939, an Assistant Medical Officer (Dr. J. M. Murphy) devoting five sessions per week to the work.

Dr. Murphy has reported on the survey, from September, 1939, to the end of December, 1940, as follows :—

> A total number of 22,336 children, which represents 88·7 per cent. of the number on the school registers, were examined. As a result, 1,868 (8·4 per cent.) were classified as slightly subnormal (category C.) and 41 (0·2 per cent.) as bad (category D.).
>
> During the greater part of the survey a child was judged to be suffering from malnutrition only if definite physical signs such as thinness, poor muscle tone, bad posture, pallor, anaemia, dark rings under the eyes, debilitated appearance or stunted growth were in evidence. Recommendations by the teachers for the purpose of providing extra nourishment were accepted only if the children so recommended showed one or more of these signs.
>
> It was suggested by the Board of Education in Circular 1520 (22nd July, 1940) that such strict standards should be abandoned, and that a child should be provided with extra nourishment if there were any signs of deficiency, *however slight, whether educational or physical*, and further that, and generally speaking, the recommendation of the teacher, who had a knowledge of the child and of his home conditions, should be sufficient indication for the provision of free milk or meals.
>
> As a result of this Circular, the latter part of the survey was conducted with these instructions in mind, and, as a consequence, two sets of figures have been obtained—the first showing the number of children adjudged to be suffering from malnutrition by depending on the presence of certain physical signs only, and the second showing the number of children chosen partly on the basis of physical signs, but more especially on the recommendation of their teachers, and on such indications as unkempt appearance, poor clothing, bad footwear or mental dullness. Factors such as unemployment of the father, loss of a parent, large number of children in the family, bad family history, especially if they included tuberculosis, were also taken into consideration.

The figures of the first group were :—

Total number examined	....	20,366
Number placed in category C	....	1,405 (6·9 per cent).
,, ,, ,, ,, D	....	22 (0·1 per cent.)

In the second group the figures were :—

Total number examined	....	1,970
Number placed in category C	....	463 (23·5 per cent.)
,, ,, ,, ,, D	....	19 (1·0 per cent.)

The marked differences in the percentage figures in the two groups are worthy of note.

The D figures are ignored on account of the smallness of the numbers involved. In the second group the percentage figure in category C is more than three times that of the corresponding figure in the first group. From this difference it is reasonable to deduce that there is a large number of children who, though perhaps not showing such evidence of malnutrition as judged by the physical standard, are yet in a precarious borderline state of health and who, if allowed to continue to live at their present standard, would most probably show these physical signs of malnutrition within a period of some months or at most a year.

In such a group of children the provision of free milk would undoubtedly be of the greatest benefit in preventing a deterioration in health. The extra amount of nourishment thus provided would be the deciding factor in swinging the balance in the desired direction. In addition to milk, meals should be supplied to those whose economic or home conditions are such as to justify their inclusion.

In this survey the interview with the parent attending at the physical examination of the child was found to be of the greatest help and importance. The mother, rather than the father, was the parent of choice, as she invariably had the greater knowledge of the child. In the interview, facts such as the number of children in the family, the family diet, the economic and housing conditions, the family history, the past state of health of the child, any idiosyncrasies with regard to diet and the amount of sleep obtained by the child were noted. From these a reasonably accurate idea of the amount of nourishment available to the child was obtained and, depending on this, suitable recommendations for extra nourishment were made.

During the interview the opportunity was also taken for giving the mother simple instructions in food values and in the proper balancing of the diet where such knowledge appeared to be lacking.

On inquiring into the details of the family diet, one fact emerges very clearly in the great majority of these cases, and that is the *marked deficiency in protein* in their food. Carbohydrates abound, fats are widely used and in fair amount, but protein is very limited. The obvious and by far the most important reason for this is the question of cost. Carbohydrate foods are cheap and easily available. The cost of fats is usually moderate, but the price of protein foods is very often prohibitive to those who are unemployed, or who earn small wages, or whose family consists of a large number of children either of school or pre-school age. In such families with very limited incomes the amount of protein available is usually very small and in many cases tends to disappear almost entirely. Little milk, few eggs, and very little meat or fish are to be found in their diets. In many cases, the value of cheese as a food does not appear to be sufficiently appreciated.

Though the economic factor was found to be the main cause of the protein deficiency in the diet, another reason was the strong traditional belief among many mothers that protein in the form of meat was injurious to children, and consequently it was not uncommon to find even in comparatively well-to-do families that the amount of meat allowed to the child was very meagre—in many cases being given only once weekly and then only in very limited quantity. Often this diet was not augmented by eggs or cheese. During the survey every opportunity was taken to correct this erroneous belief.

In considering the dietetic idiosyncrasies of the child with regard to protein, rarely did any trouble arise, as the average child appeared to be more than willing to have his share of meat, eggs and other nitrogenous foods. Occasionally milk was refused, but was usually readily taken when given in cocoa, porridge or milk pudding. (With regard to asthmatics who were on milk-free diet, it was interesting to note that physically they were often very poor specimens). Fats were readily taken provided they were in the form of butter, margarine, milk or cheese. Other fats (especially meat fats) were determinedly refused, with the exception of cod-liver oil when given with malt. Carbohydrates and sugar-containing foods were very widely used and highly popular. Fresh fruits were given frequently even in poor families. Vegetables appear to give the most trouble in the child's diet, as they were frequently refused. Such foods as potatoes, swedes, carrots, parsnips, peas and beans were usually readily taken, but cabbage, cauliflower and sprouts were often refused.

Though the value of vegetables in the diet was realised by most parents, it was very common to find that they were included in the main meal of the day only once or twice weekly. This was especially noticeable during the winter months, when the cost of vegetables is high. A striking contrast was also seen in those families who had a garden or an allotment as compared with those who had neither. In the former case fresh vegetables were included in the diet on almost seven days each week, while in the latter it was not unusual to find either no vegetables in the diet or at most once or twice weekly, and then of the dried or tinned variety.

Effect of Social Circumstances.—Poverty, malnutrition and defective mental development tend to go together. In the majority of schools where the classes are divided into divisions according to the intelligence of the children the greater number of undernourished children was found in the "B" and "C" divisions. These children were poorly developed physically and mentally they were not the equal of their more fortunate school fellows in the "A" division.

Sex Distribution.—In the children examined, the impression received was that girls generally showed less evidence of malnutrition than boys. The probable reason for this is that female metabolism is usually less than male. Girls take less exercise and lead quieter lives, take more time over their meals and spend more time in their homes ; consequently they have more regular meals and so, using up less energy, tend to show less evidence of malnutrition than boys.

Age Distribution.—The impression received was that a higher percentage of cases of malnutrition occurred in the age group 7-11 years' than in the 5-7 or the 11-14 years' groups. The reason for this appears to be accounted for by the fact that the child in the youngest age group is still under the very active care of the mother, who ensures that it gets its proper share of food and nourishment, while the 11-14 years' group child is already sufficiently developed to demand its rights and to look after itself. Between these two comes the middle group child, who tends to be comparatively neglected by the mother and is not yet old enough to ensure that it gets its proper share of the family food, and therefore tends to be less well-nourished.

Extra Nourishment Provided.—The provision of free milk (half-pint for children over 8 years and one-third pint for younger children) free meals, and cod-liver oil and malt at cost price was the means adopted to supply the necessitous child with extra nourishment. Of these, the milk and the cod-liver oil and malt were very readily accepted. The majority of parents were most anxious that their children should have their daily ration of milk, and in many cases expressed the wish to pay for it. In cases of parents unable to pay, there appeared to be little hesitation in accepting the offer of free milk, as the parents evidently felt that here there was no reflection on the child, and so family pride did not suffer. Similarly, in the case of supplying cod-liver oil and malt, the payment of a sum of money covering the cost price removed the sense of obligation and indebtedness. When, however, the offer of free meals was made, the reaction was quite different. Here it was felt that the child was immediately singled out as being in receipt of public charity and that the fact would be ad-

vertised to the neighbourhood by the attendance of the child at the meal centre, and so the family pride would suffer. In addition, the fastidious child shrank from the idea of having meals in a strange place among strange children. Criticism was often expressed about the quality of the food served and the manner of serving. The result of this was that in the majority of cases the offer of free meals was refused.

Proposed New Feeding Scheme.—In the proposed new feeding scheme the diet will be properly balanced by a dietitian and the food will be cooked in a central kitchen and distributed in hot containers to the various schools, where the meals will be served under the supervision of teachers. Discipline will be maintained, social manners properly taught, cleanliness ensured, and the child will take its meal in familiar surroundings. Family pride will suffer no injury, especially if children of well-to-do parents who pay for the meals take them under the same scheme. When the scheme was explained to parents, the offer of free meals was readily accepted in cases where it undoubtedly would have been refused if the meal had to be taken at the original centre outside the school building. This is shown by the percentage figures of free meals provided in the two parts of the survey. In the first part only 0·7 per cent. of children accepted free meals, while in the second part, when the new scheme was explained, 12·1 per cent. accepted the offer. In quoting these figures it must, however, be borne in mind that the standards for the two parts of the survey were different, as already mentioned, and that that for the second part was much more generous. This would partly account for the difference in the figures, but from experience it can be stated that the proposed scheme of feeding had by far the greater influence.

The severe rationing of protein foods during the present war has resulted in the marked curtailment of many essential articles of diet. Here the child is the most likely to suffer. The proposed new scheme would obviate such a possibility, ensuring that the child would have a sufficiency of protein in its diet and also have the necessary amounts of the accessory food substances.

Voluntary Milk Scheme.—Apart from the benefits to be derived by the necessitous children, the carrying out of the survey in each school had a stimulating effect on the voluntary milk scheme. Subsequent to the initial survey, in which contact was made with each child present and during which the taking of milk was strongly encouraged, there invariably followed a sharp rise in the number of children taking milk under the voluntary scheme, this increase amounting in many schools to 50 per cent. The co-operation of the teachers in these instances was very helpful and it was realised that the active interest of the teachers in the voluntary milk scheme was the best guarantee that the high percentage of children taking the milk would be maintained.

Dental Caries and Rickets.—Another point noted during the survey was the great prevalence of dental caries in malnourished children. It was difficult to decide whether the malnutrition was the primary factor or whether the dental caries itself was one of the causes of the undernourishment. In one suburban area, viz., Ely (in Windsor Clive Council School), the evidence of old rickets was startlingly high. Here many of the children had been transferred from the poorest quarter of the city in a rehousing scheme.

Nutritional Anaemia.—Nutritional anaemia appeared to be rare. Great dependence was placed on the colour of the buccal and conjunctival mucous membranes and no attention was paid to facial pallor if the colour in these regions was good. Haemoglobin estimations were not done.

Standards of Nutrition.—Concerning the Board of Education standards of nutrition, it was felt that in the C (slightly subnormal) and D (bad) categories the transition from one group to the other was too sudden, as a great number of malnourished children were found who could be more accurately described as occupying an intermediate position between these two groups. It is suggested that the C group should be divided into CI category (slightly subnormal) and CII category (moderately subnormal), leaving the D group to include all those in a marked state of malnutrition.

Nutrition Survey in Elementary Schools—September, 1939 to December, 1940.

Period	Children on Registers of Schools Visited	Children Examined	In receipt of			Nutrition		Classified as C and D already receiving			Recommended for		
			Free Meals	Free Milk	Milk under Voluntary Scheme	C (Slightly Sub-normal).	D (Bad)	Free Meals	Free Milk	Milk under Voluntary Scheme	Free Meals and Milk	Free Milk	Cod-liver Oil and Malt
1939 Sept.—Dec.	8,239	7,499	212	438	3,729	380	1	10	27	108	15	134	
1940 Jan.—March	5,885	4,990	240	399	2,382	424	5	28	52	127	54	172	428
April—June....	5,899	5,386	231	315	2,434	454	13	35	38	127	51	220	
July—Sept.....	2,755	2,491	47	124	1,129	147	3	6	15	51	27	69	
Total	22,778	20,366	730	1,276	9,674	1,405	22	79	132	413	147	595	428
Percentage	—	*89·4*	—	—	—	*6·9*	*0·1*	—	—	—	*0·7*	*2·9*	*2·1*
1940 Oct.—Dec.*	2,383	1,970	92	285	1,078	463*	19	23	55	129	238	138	179
Percentage	—	*82·7*	—	—	—	*23·5*	*1·0*	—	—	—	*12·1*	*7·0*	*9·1*
Grand Total	25,161	22,336	822	1,561	10,752	1,868	41	102	187	542	385	733	607
Percentage	—	*88·7*	—	—	—	*8·4*	*0·2*	—	—	—	*1·7*	*3·3*	*2·7*

* Character and standards changed as result of Board of Education Circular, 1520.

Entrants.—Parents or guardians are asked to supply particulars as to the medical history of entrants prior to their routine medical inspection. During 1940 information was received regarding 862 of the 1,054 children inspected as entrants, from which the following table has been compiled :—

Diseases	Boys		Girls		Both Sexes	
	Number	Percentage	Number	Percentage	Number	Percentage
Measles	244	*57·0*	255	*58·8*	499	*57·9*
Whooping cough	152	*35·0*	190	*43·8*	342	*39·7*
Chickenpox	98	*22·9*	92	*21·2*	190	*22·0*
Scarlet fever	31	*7·2*	17	*3·9*	48	*5·6*
Diphtheria	17	*4·0*	14	*3·2*	31	*3·6*
Mumps	15	*3·5*	7	*1·6*	22	*2·6*
Rheumatism	5	*1·2*	8	*1·8*	13	*1·5*
Chorea	2	*0·5*	—	—	2	*0·2*
Tuberculosis	1	*0·2*	2	*0·5*	3	*0·3*
Bronchitis	15	*3·5*	25	*5·8*	40	*4·6*
Pneumonia	20	*4·7*	23	*5·3*	43	*5·0*
Other diseases	63	*14·7*	50	*11·5*	113	*13·1*

Of the 1,054 entrants medically inspected, 183 were found to require immediate treatment (excluding defects of nutrition, uncleanliness and dental disease) and, in addition, many diseases or defects were found which required to be kept under observation. The numbers of *all* diseases or defects found in 399 of the entrants inspected, whether requiring treatment or to be kept under observation, were as follows :—

Diseases or Defects.	*Number.*
Skin diseases	23
Defective vision	13
External eye diseases	27
Ear diseases	19
Diseases of nose and throat	107
Heart diseases	43
Anaemia	7
Lung diseases (non-tuberculous)	27
Tuberculosis—	
Pulmonary	1
Non-pulmonary	2
Dental defects	153
Other defects and diseases	48
Total	470

Taking all diseases and defects into account, 37·8 per cent. of the entrants were found to be defective, as compared with 30·6 per cent. in 1939.

IV.—"FOLLOWING UP" AND THE WORK OF SCHOOL NURSES.

A summary of the work of school nurses in connection with domiciliary visitation is given in the following table :—

Diseases or Defects	First Visits	Revisits	Total
Defects of vision	534	154	688
Defects of teeth	264	55	319
Defects of ear, nose and throat	321	92	413
Other defects and diseases	1,724	394	2,118
Total ..	2,843	695	3,538

The following is a summary of other work done by the school nurses during the year :—

Number of—

Special visits to schools	374
Children examined for uncleanliness	38,161
Children found with vermin and/or nits ...	2,973
Children previously found with vermin and/or nits re-examined	2,010
Children found to be free from vermin and nits	777
Children suffering from scabies dealt with at the Cleansing Station	196
Baths given	434

V.—TREATMENT.

Minor Ailments and Diseases of the Skin.—Details of the treatment of minor ailments and diseases of the skin undertaken at the school clinics are given on page 97.

Particulars of the work carried out by the Queen's Institute of District Nursing in connection with the home nursing and treatment of minor ailments are given in the following table :—

Diseases or Defects	Cases Carried over from 1939		Cases Referred for Treatment during 1940		Total	
	Cases	Visits	Cases	Visits	Cases	Visits
Skin :—						
Impetigo	3	12	54	765	57	777
Other skin diseases	—	—	10	116	10	116
Minor eye defects	1	23	3	133	4	156
Minor ear defects	—	—	9	210	9	210
Miscellaneous	3	25	48	592	51	617
Total	7	60	124	1,816	131	1,876

Visual Defects and External Eye Diseases.—Particulars of the treatment of visual defects and external eye diseases and the provision of spectacles are given on page 97.

Nose and Throat Defects.—The numbers of defects treated are given on page 98.

Under the arrangement whereby children regarding whom specialist opinion is necessary are examined by Specialist Aural Surgeons, four clinic sessions were held during 1940. The number of children specially examined was 97, of whom 27 were found not to be in need of treatment. The recommendations (72) made in other 70 cases were as follows :—

Treatment at Llandough Hospital :—

For radical mastoid or other operative treatment of the ear	4
For removal of nasal obstruction, drainage of antrum, etc.	2
For removal of adenoids and/or enlarged tonsils	23
Treatment and supervision at Ear, Nose and Throat Clinic	19

Admission to Oral School for the Deaf	1
Referred to Cardiff Royal Infirmary	3
Other forms of treatment	1
For further observation at various periods	19

Ear Disease and Defective Hearing.—The number of cases treated is given on page 97.

Dental Defects.—Particulars of the work done will be found on pages 98 and 99.

Orthopaedic and Postural Defects.—The following is a summary of the work carried out at the orthopaedic clinic during 1940 :—

	Children of School Age.
Consultation Clinic :—	
Examined for first time	253
Recommended for treatment and/or appliances for first time	145
Recommendations for further treatment and/or appliances	243
Recommendations for :—	
Treatment in Hospital	29
Treatment at Clinic (Special and Routine)	163
Appliances	18
Alterations to appliances	4
Alterations to boots	197
Other forms of treatment	22
Treated at Clinic for first time	13
Attendances at Clinic	967
Routine treatment (massage, electricity, exercises, etc.) :—	
Treated at Clinic for first time	83
Attendances for routine treatment	2,892

The following statement relates to treatment at and provision of appliances, etc., through the Prince of Wales' Hospital, Cardiff, during 1940 :—

	Children of School Age.
Hospital Treatment :—	
Admitted to Prince of Wales' Hospital—	
(*a*) Day cases	3
(*b*) Other cases	21
Under treatment at Prince of Wales' Hospital at end of 1940	5

On Prince of Wales' Hospital waiting list at end of 1940—

(*a*) Day cases	—
(*b*) Other cases	26

Other treatment or provision (including appliances, etc., provided following hospital treatment) :—

Appliances provided	50
Appliances altered	17
Alterations to boots	275
Other forms of treatment provided	10

The diseases or defects found in children of school age examined at the clinic for the first time during the year have been classified as follows :—

Diseases or Defects.	*Number.*
Defective posture	52
Scoliosis	9
Flat Feet	57
Talipes	1
Poliomyelitis	13
Spastic paralysis	1
Congenital malformation or defect	15
Congenital dislocation of hip	1
Torticollis	3
Perthes' disease	3
Knock-knee	24
Metatarsus varus and intoeing	3
Claw feet	4
Trauma	4
Other defects	63
Total ...	253

The following is a classification of the cases discharged during the year :—

Reason.	*Number.*
Cured	23
Improved	20
Unlikely to benefit further	8
Left the district	11
Failed to attend for treatment	50
Over school age	24
Other reasons (including trivial defects)	13
Total	149

Heart Disease and Rheumatism.—As the treatment of children suffering from heart disease and rheumatism is carried out under the aegis of the Health Committee of Cardiff City Council, particulars of the work undertaken are given in the report on the general health service. The number of school children under supervision at the end of the year was 849.

Radiography.—Radiography is carried out at the City Lodge Hospital by a medical officer of the department. During the year, 43 school children were referred from the clinics to be radiographed, the total number of radiograms taken being 60. Forty-four parts of the body required X-ray examination, as follows :—

Teeth	5
Spine	5
Skull	1
Shoulder	2
Arm	1
Finger	1
Hip	6
Knee	4
Ribs	1
Leg	2
Foot	16
Total	44

VI.—INFECTIOUS DISEASES.

The numbers of school children ascertained to be suffering from infectious diseases during the year were as follows :—

Scarlet fever	176
Diphtheria	349
Acute pneumonia	28
Cerebro-spinal fever	56
Acute poliomyelitis	12
Acute polioencephalitis	3
Acute encephalitis lethargica	2
Dysentery	9
Enteric fever	1
Erysipelas	2
Tuberculosis—Respiratory	13
,, —Other forms	44
Chickenpox	385
Measles	259
Rubella	202
Whooping cough	443
Mumps	538

Vaccinal State of School Children.—Of 5,595 elementary and high school children inspected at routine inspection during 1940, 2,578, or 46·1 per cent., were found to be vaccinated.

VII.—PROVISION OF MEALS.

A scheme for the establishment of a central kitchen for the preparation and cooking of mid-day meals for school children and for feeding centres at schools, in place of the arrangements whereby meals are provided at feeding centres by caterers, has been prepared and approved, but owing to difficulties arising out of war conditions it has not yet been possible to put it into operation.

During 1940 the numbers of children provided with dinners and/or milk were as follows :—

Average number of necessitous children provided with dinner daily	743
Average number of necessitous children provided with milk daily	2,243
Average number of children provided with milk daily under the voluntary scheme	13,079

The cost of free meals and milk provided during 1940 was £3,888 and £1,609 respectively.

VIII.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

The numbers of blind, deaf, defective and epileptic children known to the department are shown in the table on pages 95 and 96.

Mentally Defective Children.—At the end of the year the number of mentally defective children who were not transferable to the Mental Deficiency Authority was 112, of whom 106 were attending the special day school. There were also six children who, in addition to being mentally defective, suffered from serious physical defects; five of these were also at special schools.

During the year, 46 children suspected to be mentally defective were specially examined or re-examined. The results are classified as follows :—

Feebleminded and suitable for education in a special school	4
Transferred to the care of the Mental Deficiency Authority	4
Dull and backward	30
Backward	3
Backward and physically defective	1
Physically defective	2
Unstable	1
Normal	1
Total	46

Fifteen children were notified to the Mental Deficiency Authority during 1940 under the Mental Deficiency (Notification of Children) Regulations, 1928.

Mentally Retarded Children.—At the end of the year, 34 children (23 boys and 11 girls) were attending the special classes for mentally retarded children, which are known as " delta " classes and which are held at two elementary schools in the eastern and western districts of the city.

Special Schools.—The numbers of children attending the special day schools for mentally defective, blind (including partially blind), deaf, and physically defective children are shown in the tabular statement on pages 95 and 96.

Greenhill Open-Air School.—The number of physically defective children on the register at the end of the year was 104, and the average attendance during the year was 70. Seventy-five children (41 boys and 34 girls) were admitted to the school, and 19 (7 boys and 12 girls) were discharged. The following were the principal diseases or defects found in the children admitted during the year :—

Diseases or Defects.	*Number.*
Anaemia	6
Malnutrition	28
Anaemia and malnutrition	3
Quiescent tuberculosis (non-pulmonary)	4
Post-rheumatic debility	10
Post-pneumonic debility	2
Anorexia	2
Chronic bronchitis	6
Asthma	3
Rheumatic carditis	1
Cervical adenitis	7
Debility following infectious disease	2
Epilepsy	1
Total	75

Eight of the children admitted had previously shown clinical signs suggestive of tuberculosis, and there was a family history of tuberculosis in three cases.

IX.—NURSERY SCHOOL.

Severn Road Nursery School, which has accommodation for 120 children, was opened on 4th March, 1940. At the end of the year the number on the register was 115, but the attendance fluctuates considerably. The average attendance for the ten months was 73, the highest being 96 in September and the lowest 42 in December.

An assistant medical officer attends at the school during one session weekly (usually Monday) to inspect children and a nurse visits the school every morning in connection with the treatment of minor ailments and the supervision of cleanliness.

Routine medical inspection of the children is carried out as soon as possible after their admission.

Altogether, 142 children (84 boys and 58 girls) were inspected and the findings (excluding defects of nutrition, uncleanliness and dental defects) were as follows :—

Diseases or Defects	Number of Defects	
	Requiring Treatment	Requiring to be kept under Observation only.
SKIN :—		
Scabies	1	—
Impetigo	4	1
Other Diseases	6	2
EYE :—		
Blepharitis	1	—
Defective Vision	—	1
Squint	2	1
Other Conditions	—	1
EAR :—		
Otitis Media	2	—
Other Diseases	2	1
NOSE AND THROAT :—		
Enlarged Tonsils only	1	—
Adenoids only	1	—
Enlarged Tonsils aud Adenoids	—	1
Other Conditions	2	—
Enlarged Cervical Glands (Non-Tuberculous)	1	1
Defective Speech	—	1
Functional Heart Disease	—	1
Diseases of Lungs (Non-Tuberculous)	2	2
NERVOUS SYSTEM :—		
Epilepsy	—	1
Other Conditions	1	3
Deformities	2	3
Other Defects and Diseases	1	1

The number of children referred for medical treatment was 26.

Eight children were found to be unclean and 15 to require dental treatment.

Children referred for treatment are dealt with in the same way as those attending the elementary schools, all the facilities of the clinics being available for them.

The following is a classification of the nutrition of the 142 children inspected :—

	Number.	*Percentage.*
A (Excellent)	3	*2·1*
B (Normal)	104	*73·3*
C (Slightly Subnormal)	10	*7·0*
D (Bad)	25	*17·6*

X.—SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION.

The average number of pupils and the average attendance at high schools during 1940 were 3,964 and 3,653 respectively.

The number of pupils inspected at routine medical inspections was as follows :—

Boys ..	750
Girls	659
Total ..	1,409

The numbers specially inspected and the numbers of re-inspections undertaken were as follows :—

		Boys	Girls	Total
Special Inspections	At School	21	21	42
	At School Clinic ...	81	151	232
	Total	102	172	274
Re-Inspections	At School	12	11	23
	At School Clinic	91	177	268
	Total	103	188	291

Details of the findings of medical inspection and of treatment are given in the statistical tables on pages 100 to 104.

XI.—MISCELLANY.

Medical Examination of Teachers.—The number of newly appointed and other teachers examined by the medical staff was one male and three females.

Juvenile Employmont.—Four children (2 boys and 2 girls) were medically examined on the request of the Juvenile Employment (Education) Officer as to their suitability and fitness for employment and 12 children (4 boys and 8 girls) were examined in connection with the issue of entertainment licences.

Junior Instruction Centres.—Particulars of the work carried out in connection with the medical and dental inspection and treatment of juveniles attending the Junior Instruction Centres during 1940 are given below :—

	Boys	Girls	Total
Number medically inspected	9	19	28
Number found to require—			
(*a*) Medical treatment	2	4	6
(*b*) Dental treatment	4	7	11

Classification of the nutrition of juveniles inspected :—

	Inspected	Normal		Slightly Subnormal	
		Number	Per cent.	Number	Per cent.
Boys	9	8	*88·9*	1	*11·1*
Girls	19	17	*89·5*	2	*10·5*
Total	28	25	*89·3*	3	*10·7*

Juveniles inspected who received treatment under the Authority's scheme : –

	Boys	Girls	Total
Medical treatment	2	4	6
Dental treatment	4	7	11

Defects treated :—

(*a*) Medical treatment :—

Defects	Boys	Girls	Total
Eye defects—Number for whom spectacles were provided	—	3	3
Minor eye defects	1	3	4
Minor ailments	2	7	9
Orthopaedic defects	1	4	5

(*b*) Dental treatment :—

	Boys	Girls	Total
Teeth filled....	2	24	26
Teeth extracted	3	14	17
Administrations of general anaesthetics	1	11	12
Other operations	2	1	3

Classes for Speech Training.—The total number of children dealt with during the year was 67. The numbers admitted and discharged were 47 and 30 respectively. Of the 30 children discharged, six were withdrawn by their parents without having completed treatment. The classification at the time of discharge of the remaining 24 was as follows :—

Provisionally cured	8
Discharged temporarily	9
Left the district	2
Left school	5
Total	24

At the close of the second and third terms, head teachers were asked to supply reports on the results of attendance of children at the classes. The following is a summary of the reports received :—

	2nd Term.	*3rd Term.*
Cured	—	1
Much Improved	16	12
Improved	23	26
Not improved	10	10
Worse	1	—
No definite report	1	11
Total	51	60

Head teachers also supplied reports at the end of the year regarding 72 scholars who had passed through the special classes and who were still attending school. These reports are summarised as follows :—

Cured	10
Much improved	24
Improved	21
Not improved	9
No definite report	8
Total	72

Miss M. Morris, the Instructress, made 146 visits to schools and to the homes of children.

Child Guidance Clinic.—The following is a summary of the work of the Child Guidance Clinic :—

(1) Number of patients referred to the Clinic during the year :—

Boys	29
Girls	15
Total	44

(2) Number of patients carried forward from 1939 :—

Boys	53
Girls	26
Total	79

(3) Sources of ascertainment of patients dealt with for the first time :—

Parents or Guardians	5
Juvenile Court	1
Social Agencies	2
Schools	14
School Medical Service	19
Other sources	3
Total	44

(4) Problems for which the 44 patients were referred to the Clinic :—

Backwardness	14
Stealing	5
Difficult and/or unmanageable	4
Temper	1
Enuresis	8
Lying	2

Truancy and/or wandering	5
Night terrors and fears	2
Screaming	1
Various	11
Total	53

(5) Ages of patients dealt with for the first time :—

Years.	*Boys.*	*Girls.*	*Total.*
3	—	1	1
5	1	—	1
6	5	1	6
7	4	2	6
8	3	3	6
9	2	2	4
10	3	2	5
11	1	3	4
12	2	—	2
13	3	1	4
14	3	—	3
15 and over	2	—	2
Total	29	15	44

(6) How the patients were dealt with :—

Service of Clinic	33
Diagnosed only	11
Total	44

(7) Results of treatment of patients discharged :—

Adjusted	14
Partially adjusted	19
Unadjusted	10
Unsuitable for further treatment	11
Total	54

(8) Number of patients waiting to be dealt with at end of year —

Boys	2
Girls	2
Total	4

(9) Work of Sections :— ....

(*a*) *Psychiatric :—*

New patients dealt with	44
Re-examinations	299
Interviews with parents	131

(*b*) *Psychological :—*

New patients dealt with	42
Re-examinations	26
Interviews with parents or teachers	4
Coaching periods	207
Visits to schools	3

(*c*) *Social Service :—*

Interviews with parents, etc., at Clinic	70
Visits to homes of patients	313
Other visits concerning patients	100
Play groups held at Clinic	8

(10) Staff conferences regarding patients 58

Porthcawl Camp School.—On 1st May, 1940, a camp school, which was provided by the Cardiff Education Committee, was opened at Porthcawl, near the sea and about 30 miles from Cardiff.

The camp school, which has accommodation for 60 children, is controlled by the Cardiff Youth Committee, which consists of 50 members, representing the Cardiff Education Committee and various voluntary associations concerned with juvenile welfare.

The camp school was specially built and equipped for the purpose. The buildings are constructed of brick and are centrally heated. There are two dormitories, each furnished with 30 single beds. Sleeping accommodation for the teachers is provided in rooms adjoining the dormitories. There is a playing field of approximately six acres. A fully-equipped dispensary for first-aid and other treatment is provided.

The period of stay at the camp is two weeks, and boys and girls between the ages of 11 and 14 years are accepted. Boys and girls go to the camp in separate groups alternately and, as far as possible, they are selected from the same school or neighbouring schools. Clean bedclothes and towels are provided for the use of each child.

Children are selected for admission mainly on medical grounds, but those who, in the opinion of head teachers, are in need of a holiday are also accepted.

All children are medically examined prior to acceptance for admission to the camp, and information regarding the need for care in dealing with particular children on account of heart irregularity, otorrhoea, etc., involving restriction of swimming, organised games or physical training, is sent to the Head Teacher.

No charge is made for travelling to and from the camp school or for other expenses, but the children have to be provided with toothbrush, hair brush and comb, change of underclothes, pyjamas or nightdress, plimsolls or slippers, overcoat or mackintosh, bathing costume, gas mask and ration book.

A nurse resides at the camp school and arrangements have been made for a local doctor and a dentist to attend when necessary.

XII.—STATISTICAL TABLES.

ELEMENTARY SCHOOLS.

TABLE I.

MEDICAL INSPECTION.

A.—Routine Medical Inspections.

Number of inspections in the prescribed Groups :—	
Entrants (within 12 months of admission)	1,054
Second Age Group (8 to 9 years)	1,216
Third Age Group (over 12 years)	1,916
Total	4,186
Number of other Routine Inspections	163
Grand Total	4,349

B.—Other Inspections.

Number of Special Inspections	4,930
Number of Re-inspections....	5,159
Total	10,089

C.—Children found to require Treatment.

Number of individual children found at routine medical inspection to require treatment (excluding defects of nutrition, uncleanliness and dental disease) :—

Group	Found to require Treatment	
	Number	Percentage
Entrants (within 12 months of admission)	183	*17·4*
Second Age Group (8 to 9 years)	262	*21·5*
Third Age Group (over 12 years)	422	*22·0*
Total	867	*20·7*
Other Routine Inspections	41	*25·1*
Grand Total	908	*20·9*

ELEMENTARY SCHOOLS.

TABLE II.

A.—DEFECTS FOUND BY MEDICAL INSPECTION.

DEFECT OR DISEASE	Routine Inspections: No. of Defects: Requiring Treatment	Routine Inspections: No. of Defects: Requiring to be kept under observation, but *not* requiring Treatment	Special Inspections: No. of Defects: Requiring Treatment	Special Inspections: No. of Defects: Requiring to be kept under observation, but *not* requiring Treatment
Skin: (1) Ringworm—Scalp	—	—	6	—
Skin: (2) ,, Body	—	—	34	—
Skin: (3) Scabies	11	—	193	1
Skin: (4) Impetigo	18	—	828	—
Skin: (5) Other Diseases (Non-Tuberculous)	44	2	179	22
Total (Heads 1 to 5)	73	2	1,240	23
Eye: (6) Blepharitis	7	2	17	—
Eye: (7) Conjunctivitis	1	—	10	—
Eye: (8) Keratitis	—	—	1	—
Eye: (9) Corneal Opacities	—	—	2	2
Eye: (10) Other Conditions (excluding Defective Vision and Squint)	6	—	27	2
Total (Heads 6 to 10)	14	2	57	4
Eye: (11) Defective Vision (excluding Squint)	293	42	124	3
Eye: (12) Squint	39	14	8	1
Ear: (13) Defective Hearing	24	5	40	4
Ear: (14) Otitis Media	24	—	63	3
Ear: (15) Other Ear Diseases	9	—	48	5
Nose and Throat: (16) Chronic Tonsillitis only	143	73	105	37
Nose and Throat: (17) Adenoids only	7	—	9	4
Nose and Throat: (18) Chronic Tonsillitis and Adenoids	16	5	38	8
Nose and Throat: (19) Other Conditions	19	1	125	31
(20) Enlarged Cervical Glands (Non-Tuberculous)	28	14	54	9
(21) Defective Speech	9	3	10	—
Heart and Circulation: Heart Disease :—				
Heart and Circulation: (22) Organic	18	34	30	52
Heart and Circulation: (23) Functional	12	29	33	50
Heart and Circulation: (24) Anaemia	18	4	97	7
Lungs: (25) Bronchitis	11	6	38	24
Lungs: (26) Other Non-Tuberculous Diseases	18	25	92	91
Tuberculosis: Pulmonary :—				
Tuberculosis: (27) Definite	—	1	—	—
Tuberculosis: (28) Suspected	5	—	8	2
Tuberculosis: Non-Pulmonary :—				
Tuberculosis: (29) Glands	2	1	13	3
Tuberculosis: (30) Bones and Joints	—	2	—	1
Tuberculosis: (31) Skin	—	—	—	—
Tuberculosis: (32) Other Forms	—	2	—	—
Total (Heads 29 to 32)	2	5	13	4
Nervous System: (33) Epilepsy	1	1	4	—
Nervous System: (34) Chorea	9	—	26	6
Nervous System: (35) Other Conditions	18	3	55	37
Deformities: (36) Rickets	—	—	—	—
Deformities: (37) Spinal Curvature	6	—	—	—
Deformities: (38) Other Forms	35	3	37	17
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Disease)	163	51	753	344
Total	1,014	323	3,107	766

B.—CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

AGE GROUPS	Number of Children Inspected	A (Excellent)		B (Normal)		C (Slightly Subnormal)		D (Bad)	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Entrants (within 12 months of admission)	1,054	33	*3·1*	921	*87·4*	73	*6·9*	27	*2·6*
Second Age Group (8 to 9 years)	1,216	25	*2·1*	1,108	*91·1*	58	*4·7*	25	*2·1*
Third Age Group (over 12 years)	1,916	65	*3·4*	1,677	*87·6*	131	*6·8*	43	*2·2*
Other Routine Inspections	163	8	*4·9*	120	*73·6*	23	*14·1*	12	*7·4*
Total	4,349	131	*3·0*	3,823	*88·0*	285	*6·5*	107	*2·5*

TABLE III.

EXCEPTIONAL CHILDREN AT END OF 1940.

(No child entered under more than one heading).

BLIND CHILDREN :—		
At Certified Schools for the Blind		7
PARTIALLY SIGHTED CHILDREN :—		
At Certified Schools for the Partially Sighted ...		27
DEAF CHILDREN :—		
At Certified Schools for the Deaf	26	
At Public Elementary Schools	1	
Total		27
FEEBLEMINDED CHILDREN :—		
At Certified Schools for Mentally Defective Children	106	
At no School or Institution	6	
Total		112
CHILDREN SUFFERING FROM SEVERE EPILEPSY :—		
At Certified Special Schools . .		1
CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS :—		
At Institutions	6	
At no School or Institution	1	
Total		7
CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS :—		
At Certified Special Schools	10	
At Public Elementary Schools	5	
At other Institutions . .	26	
At no School or Institution . .	10	
Total		51

DELICATE CHILDREN (Children whose general health renders it desirable that they should be specially selected for admission to an open-air school) :—		
At Certified Special Schools		104
CRIPPLED CHILDREN :—		
At Certified Special Schools	5	
At Public Elementary Schools	60	
At other Institutions	1	
At no School or Institution	6	
Total		72
CHILDREN WITH HEART DISEASE (Children whose defect is so severe as to necessitate the provision of special educational facilities) :—		
At Certified Special Schools	22	
At Public Elementary Schools	14*	
At other Institutions	1	
At no School or Institution	6	
Total		43
CHILDREN SUFFERING FROM MULTIPLE DEFECTS :—		
(*a*) Feebleminded and crippled :—		
At Certified Special Schools	3	
At no School or Institution	1	
Total		4
(*b*) Feebleminded and epileptic :—		
At Certified Special Schools		2

* These children attend school only when fit to do so.

ELEMENTARY SCHOOLS.

TABLE IV.

TREATMENT TABLES.

GROUP I.—Minor Ailments (excluding Uncleanliness, for which see Table VI).

Defect or Disease	Number of Defects treated or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
Skin :—			
Ringworm—Scalp—			
(i) X-ray Treatment	—	—	—
(ii) Other	1	—	1
Ringworm—Body	9	—	9
Scabies	288	—	288
Impetigo	988	53	1,041
Other Skin Disease	278	6	284
Minor Eye Defects :—			
(External and other, but excluding cases falling in Group 11)	97	3	100
Minor Ear Defects	568	9	577
Miscellaneous			
(*e.g.*, minor injuries, bruises, sores, chilblains, etc.) ...	291	53	344
Total	2,520	124	2,644

GROUP II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

Defect or Disease	Number of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including Squint)	1,409	—	1,409
Other Defect or Disease of the Eyes (excluding those recorded in Group I)	274	—	274
Total	1,683	—	1,683

Defect or Disease	Number of Children for whom Spectacles were			
	Prescribed		Obtained	
	Under the Authority's Scheme	Otherwise	Under the Authority's Scheme	Otherwise
Errors of Refraction (including Squint)	1,110	—	1,032*	—

* Including 150 free of charge.

GROUP III.—Treatment of Defects of Nose and Throat.

	Number of Defects			
	Tonsils only	Adenoids only	Tonsils and Adenoids	Other Defects
Received Operative Treatment—				
Under the Authority's Scheme, in Hospital	171	5	175	—
By Private Practitioner or Hospital, apart from the Authority's Scheme	—	—	—	—
Total	171	5	175	—
Received other forms of treatment	463			
Total number treated	814			

GROUP IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme			Otherwise			Total number treated
	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	
Number of children treated	27*	1*	426	—	—	—	426

* Also treated at an Orthopaedic Clinic.

TABLE V.

Dental Inspection and Treatment.

(1) Number of Children inspected by the Dentists :—

	Aged		
(a) Routine Age-Groups	3	52	
	4	436	
	5	1,688	
	6	1,837	
	7	2,022	
	8	2,026	
	9	2,081	Total . 17,994
	10	1,987	
	11	1,884	
	12	1,582	
	13	1,638	
	14	735	
	15	26	
(b) Specials			366
		Grand Total	18,360

(2)	Found to require treatment		12,754
(3)	Actually treated		7,183*
(4)	Attendances made by children for treatment		13,370
(5)	Half-days devoted to :—		
	Inspection	107	
	Treatment	2,244	
	Total		2,351
(6)	Fillings :—		
	Permanent teeth	4,747	
	Temporary teeth....	474	
	Total		5,221
(7)	Extractions :—		
	Permanent teeth	4,143	
	Temporary teeth....	14,492	
	Total		18,635
(8)	Administrations of general anaesthetics for extractions		7,484
(9)	Other operations :—		
	Permanent teeth	1,404	
	Temporary teeth....	1	
	Total		1,405

* Including 3,090 who had received treatment previously.

TABLE VI.

Uncleanliness and Verminous Conditions.

(i)	Average number of visits per school made during the year by the School Nurses	2·8
(ii)	Total number of examinations of children in the schools by School Nurses	38,161
(iii)	Number of individual children found unclean	2,973
(iv)	Number of individual children cleansed under Section 87 (2) and (3) of the Education Act, 1921	—
(v)	Number of cases in which legal proceedings were taken :—	
	(a) Under the Education Act, 1921	—
	(b) Under School Attendance Byelaws	—

SECONDARY AND HIGH SCHOOLS.

TABLE I.

MEDICAL INSPECTION.

A.—Routine Medical Inspections.

Number of Routine Inspections	1,409

B.—Other Inspections.

Number of Special Inspections	274
Number of Re-inspections	291
Total	565

C.—Children Found to Require Treatment.

Number of individual children found at routine medical inspection to require treatment (excluding defects of nutrition, uncleanliness and dental disease) :—

Group	Found to require Treatment	
	Number	Percentage
All children inspected	229	*16·2*

SECONDARY AND HIGH SCHOOLS.

TABLE II.

A.—DEFECTS FOUND BY MEDICAL INSPECTION.

DEFECT OR DISEASE	Routine Inspections: No. of Defects: Requiring Treatment	Routine Inspections: No. of Defects: Requiring to be kept under observation, but *not* requiring Treatment	Special Inspections: No. of Defects: Requiring Treatment	Special Inspections: No. of Defects: Requiring to be kept under observation, but *not* requiring Treatment
Skin				
(1) Ringworm—Scalp	—	—	—	—
(2) ,, Body	—	—	1	—
(3) Scabies	6	—	7	—
(4) Impetigo	4	—	6	—
(5) Other Diseases (Non-Tuberculous)	13	1	38	12
Total (Heads 1 to 5)	23	1	52	12
Eye				
(6) Blepharitis	6	—	1	—
(7) Conjunctivitis	1	—	—	—
(8) Keratitis	—	—	—	—
(9) Corneal Opacities	—	—	—	—
(10) Other Conditions (excluding Defective Vision and Squint) ...	3	—	—	—
Total (Heads 6 to 10) ...	10	—	1	—
(11) Defective Vision (excluding Squint)	127	11	6	—
(12) Squint	6	1	1	—
Ear				
(13) Defective Hearing	3	—	2	—
(14) Otitis Media	6	—	—	—
(15) Other Ear Diseases	1	—	—	1
Nose and Throat				
(16) Chronic Tonsillitis only	11	7	—	—
(17) Adenoids only	1	—	—	—
(18) Chronic Tonsillitis and Adenoids	2	—	—	—
(19) Other Conditions	14	2	2	2
(20) Enlarged Cervical Glands (Non-Tuberculous)	2	2	—	—
(21) Defective Speech	3	1	—	—
Heart and Circulation				
Heart Disease :–				
(22) Organic	5	10	5	2
(23) Functional	4	7	6	5
(24) Anaemia	3	4	4	—
Lungs				
(25) Bronchitis	—	—	—	—
(26) Other Non-Tuberculous Diseases	5	3	5	5
Tuberculosis				
Pulmonary :—				
(27) Definite	—	—	—	—
(28) Suspected	—	—	—	—
Non-Pulmonary :—				
(29) Glands	—	—	—	—
(30) Bones and Joints	—	—	—	—
(31) Skin	—	—	—	—
(32) Other Forms	—	—	—	—
Total (Heads 29 to 32)	—	—	—	—
Nervous System				
(33) Epilepsy	—	1	1	—
(34) Chorea	1	1	—	—
(35) Other Conditions	3	—	1	2
Deformities				
(36) Rickets	—	—	—	—
(37) Spinal Curvature	1	—	—	—
(38) Other Forms	7	1	7	1
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Disease)	24	9	42	26
Total	262	61	135	56

B.—CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR AT ROUTINE MEDICAL INSPECTION.

Number of Children Inspected	A (Excellent)		B (Normal)		C (Slightly Subnormal)		D (Bad)	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
1,409	43	*3·0*	1,299	*92·2*	49	*3·5*	18	*1·3*

SECONDARY AND HIGH SCHOOLS.

TABLE III.

TREATMENT TABLES.

GROUP I.—Minor Ailments (excluding Uncleanliness).

Defect or Disease	Number of Defects treated or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
Skin :—			
Ringworm—Scalp—			
(i) X-ray Treatment	—	—	—
(ii) Other	—	—	—
Ringworm—Body	1	—	1
Scabies	8	—	8
Impetigo	5	1	6
Other Skin Disease	28	1	29
Minor Eye Defects :—			
(External and other, but excluding cases falling in Group II)	—	—	—
Minor Ear Defects	18	—	18
Miscellaneous			
(*e.g.*, minor injuries, bruises, sores, chilblains, etc.)....	—	—	—
Total	60	2	62

GROUP II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

Defect or Disease	Number of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including Squint)	307	1	308
Other Defect or Disease of the Eyes (excluding those recorded in Group I)	17	—	17
Total	324	1	325

Defect or Disease	Number of Children for whom Spectacles were			
	Prescribed		Obtained	
	Under the Authority's Scheme	Otherwise	Under the Authority's Scheme	Otherwise
Errors of Refraction (including Squint) ..	268	1	268*	1

* Including 3 free of charge.

GROUP III.—Treatment of Defects of Nose and Throat.

	Number of Defects			
	Tonsils only	Adenoids only	Tonsils and Adenoids	Other Defects
Received Operative Treatment—				
Under the Authority's Scheme, in Hospital	9	—	5	—
By Private Practitioner or Hospital, apart from the Authority's Scheme	—	—	—	—
Total	9	—	5	—
Received other forms of treatment ...	21			
Total number treated	35			

GROUP IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme			Otherwise			Total number treated
	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	
Number of children ... treated	2*	—	50	—	—	—	50

* Also treated at an Orthopaedic Clinic.

TABLE IV.

Dental Inspection and Treatment.

(1)	Number of children inspected by the Dentists :—		
	(*a*) Routine Age-groups		—
	(*b*) Specials		660
(2)	Found to require treatment		657
(3)	Actually treated		770*
(4)	Attendances made by children for treatment		2,845
(5)	Half-days devoted to :—		
	Inspection	†	
	Treatment	†	
	Total		†
(6)	Fillings :—		
	Permanent teeth	2,288	
	Temporary teeth....	—	
	Total		2,288
(7)	Extractions :—		
	Permanent teeth	802	
	Temporary teeth....	117	
	Total		919
(8)	Administrations of general anaesthetics for extractions		496
(9)	Other operations :—		
	Permanent teeth	626	
	Temporary teeth....	—	
	Total		626

* Including 460 who had received treatment previously.

† Special sessions are not devoted to inspection and treatment of secondary and high school children ; the numbers of sessions devoted to inspection and treatment of all children are shown on page 99.

MENTAL DEFICIENCY SERVICE

The total number of ascertained mentally defective persons for the care of whom the Mental Deficiency Committee were responsible at the end of 1940 was 704—an increase of five over the number at the end of the previous year. Of the total number of cases, 249 were in institutions or under statutory guardianship. The number of ascertained cases remaining at home was 455 (332 under statutory supervision and 123 under voluntary supervision). In addition, there were 68 cases under Lunacy Orders in institutions and eight cases in poor-law institutions but not under Orders who would be dealt with more appropriately under the Mental Deficiency Acts. There were also three cases under consideration but not ascertained to be mentally defective and 11 cases were under supervision for other Authorities.

The new building for the Occupation and Training Centre, which has been referred to in previous reports, has been taken over by the Air Raid Precautions Committee as an Ambulance Depot for the duration of the present war, so that the work of the Centre is being carried on in the old premises.

Particulars of the work done in connection with mental deficiency during 1940 and of the mentally defective persons under the care of the Mental Deficiency Committee are given in the following tabular statements :—

SUMMARY OF WORK, 1940.

	Males.	*Females.*	*Total.*
(1) Cases examined for the first time :—			
Idiots	—	1	1
Imbeciles	4	1	5
Feebleminded	8	6	14
Not mentally defective	4	2	6
Not classified	1	—	1
Total	17	10	27
(2) Re-examinations	64	58	122
(3) Removed from list of ascertained cases under supervision at home :—			
(i) Removed to institutions at instance of Local Authority—			
Obligatory cases	6	5	11
(ii) Deceased....	1	6	7
(iii) Left Cardiff	3	—	3
(iv) Admitted to Place of Safety	1	—	1
(v) Admitted to Poor Law Institutions	1	1	2
(vi) Decertified	1	—	1
Total	13	12	25

Summary of Work, 1940—*continued.*

	Males.	*Females.*	*Total.*
(4) Transferred from Residential School to Place of Safety	1	—	1
(5) Removed to Institutions (not previously under supervision at home)	3	—	3
(6) Total number removed to Institutions or placed under Guardianship at the instance of the Local Authority	9	5	14
(7) Transferred from one Institution to another	2	4	6
(8) Institution or guardianship cases that ceased to be chargeable to the Local Authority—			
(i) Deceased	2	2	4
(ii) On licence	3	1	4
(iii) Orders lapsed	—	1	1
(9) Instances in which licence from institutions or guardianship was granted	5	6	11
(10) Instances in which cases on licence were returned to institutions or guardianship	—	4	4
(11) Cases in which Orders lapsed or cases discharged from Orders	—	2	2
(12) Died in State Institutions	1	—	1
(13) Died in Mental Hospitals or Poor Law Institutions	1	3	4
(14) Visits paid by Visiting Officers	....	....	1,552

SOURCES OF ASCERTAINMENT OF CASES EXAMINED FOR FIRST TIME.

Source of Ascertainment	Idiots	Imbeciles	Feeble-minded	Not Mentally Defective	Not Classified	Total
Local Education Authority	—	1	10	1	—	12
Public Health Department	—	2	—	1	—	3
Public Assistance Department	—	1	—	—	—	1
Other Sources	1	1	4	4	1	11
Total	1	5	14	6	1	27

Position at 31st December, 1940.

	Males.	Females.	Total.
(1) Obligatory Cases :—			
(a) In Institutions	115	90	205*
(b) Under Guardianship	—	3	3
(c) On Licence from Institutions	8	14	22
(d) Evacuated from Ely Lodge	1	6	7
(e) On Licence from Guardianship	—	1	1
(2) Cases in regard to whom the Local Authority contributes under permissive powers :—			
(a) In Institutions	6	5	11
(b) On licence from Institutions	—	—	—
Total	130	119	249
(3) Cases in Institutions under Lunacy Orders ascertained to be mentally defective :—			
(a) Ely Lodge	31	30	61
(b) Mental Hospitals	2	5	7
Total	33	35	68
(4) Cases at home—ascertained to be defective :—			
(a) Under Statutory Supervision	191	141	332
(b) Under Voluntary Supervision	56	67	123
(c) Supervised for other Authorities	5	6	11
Total	252	214	466
(5) Attending Occupation and Training Centre—included in (4) :—			
(a) Under Statutory Supervision	25	20	45
(b) Under Voluntary supervision	1	1	2
(c) Under Supervision for other Local Authorities	1	—	1
Total	27	21	48

* Including 16 cases (7 males and 9 females) maintained by the Board of Control.

Position at 31st December, 1940—continued.

	Males.	*Females.*	*Total.*
(6) "Subject to be dealt with" but action not yet taken :—			
(*a*) Notified by Local Education Authority	—	—	—
(*b*) In Poor Law Institutions	3	5	8
Total	3	5	8
(7) Under consideration but not ascertained to be defective	3	—	3

Classification of Known Cases.

	In Institutions or under Guardianship (including cases on licence, etc.)			Under Supervision at Home		
	Males	Females	Total	Males	Females	Total
Idiots	29	8	27	7	5	12
Imbeciles	49	26	75	51	56	107
Moral Defectives	—	1	1	—	1	1
Feebleminded	61	82	143	187	145	332
Post-encephalitic Deterioration	—	2	2	1	—	1
Unclassified or not examined	1	—	1	1	1	2
Total	130	119	249	247	208	455

Ages of Cases in Institutions or Under Guardianship

(including Cases on Licence, etc.)

Ages—Years	Idiots		Imbeciles		Moral Defectives		Feeble-minded		Post-encephalitic Deterioration		Unclassified		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
0— 5	—	—	—	1	—	—	—	—	—	—	—	—	1
5—10	5	—	1	1	—	—	1	—	—	—	—	—	8
10—15	3	—	6	—	—	—	4	3	—	—	—	—	16
15—25	7	5	13	7	—	—	17	25	—	1	—	—	75
25—40	4	1	24	14	—	1	35	42	—	1	1	—	123
Over 40	—	2	5	2	—	—	4	13	—	—	—	—	26
Total	19	8	49	25	—	1	61	83	—	2	1	—	249

Ages of Cases under Supervision at Home.

Ages—Years	Idiots		Imbeciles		Moral Defectives		Feeble-minded		Post-encephalitic Deterioration		Unclassified		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
5—10	—	2	4	3	—	—	1	—	—	—	1	—	11
10—15	1	2	4	5	—	—	10	9	—	—	—	—	31
15—25	3	1	22	18	—	—	108	69	—	—	—	—	221
25—40	3	—	17	22	—	1	60	47	1	—	—	—	151
Over 40	—	—	4	8	—	—	8	20	—	—	—	1	41
Total	7	5	51	56	—	1	187	145	1	—	1	1	455

Cases in Institutions and Cases under Guardianship.

(*a*) Obligatory Cases.

Name of Institution, Etc.	Idiots	Imbeciles	Moral Defectives	Feeble-minded	Post-encephalitic Deterioration	Unclassified	Total
(a) Institutions :—							
Besford Court Catholic Mental Welfare Hospital, Worcester	—	—	—	1	—	—	1
Cardiff Public Assistance Institution, Ely, Cardiff	24	50	—	54	1	—	129
Etloe House, Leyton, Essex	—	1	—	3	—	—	4
Hensol Castle Colony, near Pontyclun, Glam.	—	6	—	28	—	—	34
Hortham Colony, Bristol	—	—	—	9	—	—	9
House of Help, Bath	—	—	—	2	—	—	2
Moss Side State Institution, Maghull	—	1	—	3	—	1	5
Pield Heath House, Hillingdon, Uxbridge ...	—	1	—	—	—	—	1
Rampton State Institution, Retford	—	—	1	9	1	—	11
Rock Hall House, Combe Down, Bath	—	1	—	—	—	—	1
Royal Earlswood Institution, Redhill	—	1	—	—	—	—	1
Royal Fort Home, Cotham, Bristol	—	—	—	2	—	—	2
St. Elizabeth's Home for Epileptics, Much Hadham, Herts.	—	—	—	3	—	—	3
St. Joseph's Home, The Croft, Sudbury	—	—	—	3	—	—	3
St. Mary's Home, Painswick, Stroud, Glos.	—	—	—	6	—	—	6
St. Raphael's Colony for Epileptics, Barvin Park, Herts.	—	—	—	3	—	—	3
St. Teresa's Home, Lewisham	—	—	—	3	—	—	3
Stoke Park Colony, Stapleton, Bristol	—	8	—	8	—	—	16
(b) Guardianship :—							
Central Association for Mental Welfare, London	—	1	—	1	—	—	2
Approved Homes	—	—	—	1	—	—	1
Parents or Guardians	—	—	—	1	—	—	1
Total	24	70	1	140	2	1	238

(*b*) Permissive Cases.

Name of Institution	Idiots	Imbeciles	Feeble-minded	Total
Cardiff Public Assistance Institution, Ely, Cardiff	3	2	1	6
Etloe House, Leyton, Essex	—	—	1	1
Hensol Castle Colony, near Pontyclun, Glam.	—	1	1	2
Royal Earlswood Institution, Redhill	—	1	—	1
Stoke Park Colony, Stapleton, Bristol	—	—	1	1
Total	3	4	4	11